

Isaac Asimov CURRENT AFFAIRS

THE MAGAZINE OF

Fantasy & Science Fiction

MARCH

Felix C. Gotschalk

Harlan Ellison

Corressy

Kress

Knight

drys

AMOODB**BUT IT 03 FA
BURTON G WOODRUFF
BUTLER UNIVERSITY
INDIANAPOLIS IN 46208

SEP86

\$1.75 U.S. • Canada \$2.00 • UK £ 1.50

58370

0



716585

03



**"Rich,
beautiful, original."**
— *Piers Anthony*

"Outstanding!"
Andre Norton

"Engaging!"
Publishers Weekly

THE SHATTERED WORLD

MICHAEL REAVES

A millennium ago magicians fought a war,
and smashed the world into a thousand pieces.
Horrified at the destruction,

they set the fragments to floating about each other
in the Abyss and supplied them with
an atmosphere that men and beasts could breathe.

But that was long ago.

In a thousand years even sorcerers grow old,
and so do their spells.

Already pieces of the Shattered World
begin to collide...



MARCH

55951-6 • 416 pp. • \$3.50

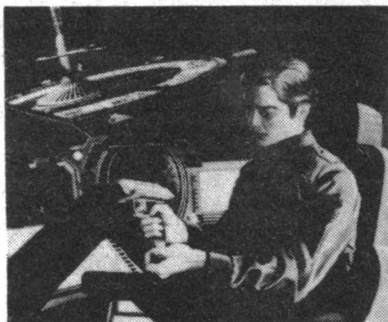
Sabotage at L-5
— The fate of Earth's first colony
hangs in the balance!

TROJAN ORBIT

MACK REYNOLDS WITH DEAD MG

Island One, the U.S.'s first space colony and symbol of an American Renaissance, is in trouble — and no one seems to know why. When the President ordered secret agent Peter Kapitz to find out what was going on, Peter's first discovery is that the Soviets are involved. His second is that they are not alone.

He will probably not live to make a third.



MARCI • 55942-7 • 384 pp. • \$2.95

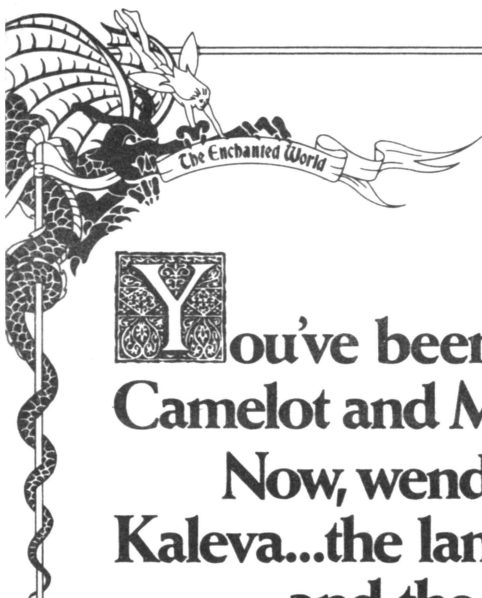
Also coming in March from Baen Books:

THE FALL OF WINTER, Jack C. Haldeman II
Humans vs. a planetary
intelligence in a battle to the death.
55947-8 • 288 pp. • \$2.95

THE CARNELIAN THRONE, Janet Morris
Book 4 in The High Couch of Silistra series.
55936-2 • 320 pp. • \$2.95



Distributed by:
Simon & Schuster
Mass Merchandise Sales Company
1230 Avenue of the Americas
New York, N.Y. 10020



You've been to Oz,
Camelot and Middle Earth.
Now, wend your way to
Kaleva...the land of Taliesin...
and the home of
wicked Baba Yaga.

TIME-LIFE BOOKS introduces THE ENCHANTED WORLD.
You have never seen lands as fabulous, creatures as amazing,
heroes as bold or evil as unspeakable.

How often have you wondered about the legends of
kingdoms where sorcerers prevail? Where elves, gnomes
and sprites ply their magical
powers. Now, you can stop
wondering, because the

Editors of TIME-LIFE BOOKS
invite you to explore the realms behind
the ancient legends: THE ENCHANTED WORLD.

A spellbinding volume will introduce you to these lands of
enchantment: *Wizards and Witches*—a sumptuously beautiful book
lavishly illustrated with full-color paintings and drawings, many
newly commissioned from today's master artists of realism
and fantasy.

You'll meet the legendary wizard Gwydion, who had
the power to turn toadstools into horses and forests
into entire armies.

You'll be entranced by the story of Baba
Yaga, who fenced her garden with

©1984, Time-Life Books Inc.

human bones. Your reading will abound with talismans, charms, runes and riddles.

We invite you to enjoy *Wizards and Witches* FREE for 10 days. Keep it by paying just \$14.95 (\$17.95 in Canada) plus shipping and handling. Afterwards, you can unlock more of the secrets THE ENCHANTED WORLD holds for you in such volumes as *Fairies and Elves...Dwarfs...Fabled Kingdoms...Dragons*.

Each volume brings you a luxurious collection of art and fascinating tales from a different realm. From encounters with the Loathly Lady...to visits in lands where winged horses soar over moonlit fortresses, knights embark on lofty quests and maidens cast spells with a glance.

Richly illustrated
9 1/8" x 12 1/4" volumes.
Hardbound in
handsome fabric
with exquisite
gilt-stamped
ornamentation.
Books of time-
less beauty and
elegance to
enhance any
home library



Collect a volume one about every other month, always for free examination. There's no minimum to buy, you can cancel at any time; and, as with *Wizards and Witches*, return any volume within 10 days with no further obligation.

To enter this world, more magical than any you have ever known, mail the coupon today.



Enter the World of WIZARDS AND WITCHES for 10 days FREE.

YES, I would like to see *Wizards and Witches* as my introduction to THE ENCHANTED WORLD series. Please send it to me for a 10-day free examination. Also send me future volumes under the terms described in this ad.

THE ENCHANTED WORLD

More than even you
ever imagined.

TIME
LIFE
BOOKS

Mail today to:
TIME-LIFE BOOKS, Time & Life Bldg
Chicago, IL 60611

Name _____

(Please print)

Address _____

Apt. _____

City _____

State or _____

Zip or _____

Province _____

Postal Code _____

Prices subject to change. Orders subject to approval.

DYAYV3

Fantasy & Science Fiction

Including VENTURE SCIENCE FICTION

MARCH • 36th Year of Publication

NOVEL

CV (3rd of 3 parts) 92 Damon Knight

NOVELETS

VESTIBULAR MAN 24 Felix C. Gotschalk

ROIMATA 54 Daphne de Jong

SHORT STORIES

OUT OF ALL THEM BRIGHT STARS 8 Nancy Kress

LEGACY 50 Terence M. Green

SOME WORK OF NOBLE NOTE 75 John Morressy

THE SHADOW OF THE MOUNTAIN 122 Gene O'Neill

TOP OF THE CHARTS 146 Bradley Denton

DEPARTMENTS

BOOKS 16 Algis Budrys

HARLAN ELLISON'S WATCHING 83 Harlan Ellison

SCIENCE: Current Affairs 136 Isaac Asimov

CARTOON: REX MAY (74)

COVER BY BARCLAY SHAW FOR "VESTIBULAR MAN"

EDWARD L. FERMAN, Editor & Publisher

DALE FARRELL, Circulation Manager

ALGIS BUDRYS, Book Review Editor

Assistant Editors: BECKY WILLIAMS, DAVID MICHAEL BUSKUS

ISAAC ASIMOV, Science Columnist

AUDREY FERMAN, Business Manager

ANNE JORDAN, Associate Editor

The Magazine of Fantasy and Science Fiction (ISSN: 0024-964X), Volume 68, No. 3, Whole No. 406, Mar. 1985. Published monthly by Mercury Press, Inc. at \$1.75 per copy. Annual subscription \$17.50; \$19.50 outside of the U.S. (Canadian subscribers: please remit in U.S. dollars or add 20%.) Postmaster: send form 3579 to Fantasy and Science Fiction, Box 56, Cornwall, Conn. 06753. Publication office, Box 56, Cornwall, Conn. 06753. Second class postage paid at Cornwall, Conn. 06753 and at additional mailing offices. Printed in U.S.A. Copyright © 1985 by Mercury Press, Inc. All rights, including translations into other languages, reserved. Submissions must be accompanied by stamped, self-addressed envelope. The publisher assumes no responsibility for return of unsolicited manuscripts.

The alien jewels spelled ecstasy...
and eternal damnation

A BAIT OF DREAMS



by Jo Clayton

Author of the *Diadem* and *Duel of Sorcery* series

They were called "Ranga Eyes"—cool, smooth gems that opened a door to magical realms of escape, happiness and peace ...but at a terrible price: an empty, lingering, narcotic death.

Where did they come from? What were they? For Gleia, Shounach and Deel these were desperate questions. Each had lost someone to the Eyes. Together they had vowed to seek out and destroy the source of their power. To brave, if they could, the jewels' hypnotic enticements, the deadly mind-traps...
set with a bait of dreams. \$3.50

The Exclusive Science Fiction
and Fantasy Line Selected by
DONALD A. WOLLHEIM

DAW
FANTASY

Distributed by
NEW AMERICAN LIBRARY

Nancy Kress (*"Explanations, Inc."*, July 1984) offers a short and poignant story about the time the alien came to Charlie's diner.

Out of All Them Bright Stars

BY
NANCY KRESS

So I'm filling the catsup bottles at the end of the night, and I'm listening to the radio Charlie has stuck up on top of the movable panel in the ceiling, when the door opens and one of them walks in. I know right away it's one of them — no chance to make a mistake about *that* — even though it's got on a nice-cut suit and a brim hat like Humphrey Bogart used to wear in *Casablanca*. But there's nobody with it, no professor from the college or government men like on the TV show from the college or even any students. It's all alone. And we're a long way out the highway from the college.

It stands in the doorway, blinking a little, with rain dripping off its hat. Kathy, who's supposed to be cleaning the coffee machine behind the counter, freezes and stares with one hand still holding the used filter up in the air like she's never going to move

again. Just then Charlie calls out from the kitchen, "Hey, Kathy, you ask anybody who won the trifecta?" and she doesn't even answer him. Just goes on staring with her mouth open like she's thinking of screaming but forgot how. And the old couple in the corner booth, the only ones left from the crowd after the movie got out, stop chewing their chocolate cream pie and stare, too. Kathy closes her mouth and opens it again, and a noise comes out like "Uh — errrrgh...."

Well, that made me annoyed. Maybe she tried to say "ugh" and maybe she didn't, but here it is standing in the doorway with rain falling around it in little drops, and we're staring like it's a clothes dummy and not a customer. So I think that's not right and maybe we're even making it feel a little bad, *I* wouldn't like Kathy staring at me like that, and I dry my hands

on my towel and go over.

"Yes, sir, can I help you?" I say.

"Table for one," it says, like Charlie's was some nice steak house in town. But I suppose that's the kind of place the government people mostly take them to. And besides, its voice is polite and easy to understand, with a sort of accent but not as bad as some we get from the college. I can tell what it's saying. I lead him to a booth in the corner opposite the old couple, who come in every Friday night and haven't left a tip yet.

He sits down slowly. I notice he keeps his hands on his lap, but I can't tell if that's because he doesn't know what to do with them or because he thinks I won't want to see them. But I've seen the close-ups on TV — they don't look so weird to me like they do to some. Charlie says they make his stomach turn, but I can't see it. You'd think he'd of seen worse meat in Vietnam. He talks enough like he did, on and on and on, and sometimes we even believe him.

I say, "Coffee, sir?"

He makes a sort of movement with his eyes. I can't tell what the movement means, but he says in that polite voice, "No, thank you. I am unable to drink coffee," and I think that's a good thing, because I suddenly remember that Kathy's got the filter out. But then he says, "May I have a green salad, please? With no dressing, please."

The rain is still dripping off his hat.

I figure the government people never told him to take off his hat in a restaurant, and for some reason that tickles me and makes me feel real bold. This polite blue guy isn't going to bother anybody, and that fool Charlie was just spouting off his mouth again.

"The salad's not too fresh, sir," I say, experimental-like, just to see what he'll say next. And it's the truth — the salad is left over from yesterday. But the guy answers like I asked something else.

"What is your name?" he says, so polite I know he's curious and not starting anything. And what could he start anyway, blue and with those hands? Still, you never know.

"Sally," I say. "Sally Gourley."

"I am John," he says, and makes that movement with his eyes again. All of a sudden it tickles me — "John!" For this blue guy! So I laugh, and right away I feel sorry, like I might have hurt his feelings or something. How could you tell?

"Hey, I'm sorry," I say, and he takes off his hat. He does it real slow, like taking off the hat is important and means something, but all there is underneath is a bald blue head. Nothing weird like with the hands.

"Do not apologize," John says. "I have another name, or course, but in my own language."

"What is it?" I say, bold as brass, because all of a sudden I picture myself telling all this to my sister Mary

Ellen and her listening real hard.

John makes some noise with his mouth, and I feel my own mouth open because it's not a word he says at all, it's a beautiful sound — like a bird-call, only sadder. It's just that I wasn't expecting it, that beautiful sound right here in Charlie's diner. It surprised me, coming out of that bald blue head. That's all it was: surprise.

I don't say anything. John looks at me and says, "It has a meaning that can be translated. It means —" But before he can say what it means, Charlie comes charging out of the kitchen, Kathy right behind him. He's still got the racing form in one hand, like he's been studying the trifecta, and he pushes right up against the booth and looks red and furious. Then I see the old couple scuttling out the door, their jackets clutched to their fronts, and the chocolate cream pie not half-eaten on their plates. I see they're going to stiff me for the check, but before I can stop them, Charlie grabs my arm and squeezes so hard his nails slice into my skin.

"What the hell do you think you're doing?" he says right to me. Not so much as a look at John, but Kathy can't stop looking and her fist is pushed up to her mouth.

I drag my arm away and rub it. Once I saw Charlie push his wife so hard she went down and hit her head and had to have four stitches. It was me that drove her to the emergency room.

Charlie says again, "What the hell do you think you're doing?"

"I'm serving my table. He wants a salad. Large." I can't remember if John'd said a large or a small salad, but I figure a large order would make Charlie feel better. But Charlie doesn't want to feel better.

"You get him out of here," Charlie hisses. He still doesn't look at John. "You hear me, Sally? You get him *out*. The government says I gotta serve spiks and niggers, but it don't say I gotta serve *bim!*"

I look at John. He's putting on his hat, ramming it onto his bald head, and half-standing in the booth. He can't get out because Charlie and me are both in the way. I expect John to look mad or upset, but except that he's holding the muscles in his face in some different way, I can't see any change of expression. But I figure he's got to feel something bad, and all of a sudden I'm mad at Charlie, who's a bully and who's got the feelings of a scumbag. I open my mouth to tell him so, plus one or two other little things I been saving up, when the door flies open and in burst four men, and damn if they aren't *all* wearing hats like Humphrey Bogart in *Ca-sablanca*. As soon as the first guy sees John, his walk changes and he comes over slower but more purposeful-like, and he's talking to John and to Charlie in a sincere voice like a TV anchorman giving out the news.

I see the situation now belongs to

him, so I go back to the catsup bottles. I'm still plenty burned, though, about Charlie manhandling me and about Kathy rushing so stupid into the kitchen to get Charlie. She's a flake and always has been.

Charlie is scowling and nodding. The harder he scowls, the nicer the government guy's voice gets. Pretty soon the government guy is smiling sweet as pie. Charlie slinks back into the kitchen, and the four men move toward the door with John in the middle of them like some high school football huddle. Next to the real men, he looks stranger than he did before, and I see how really flat his face is. But then when the huddle's right opposite the table with my catsup bottles, John breaks away and comes over to me.

"I am sorry, Sally Gourley," he says. And then: "I seldom have the chance to show our friendliness to an ordinary Earth person. I make so little difference!"

Well, that throws me. His voice sounds so sad, and besides, I never thought of myself as an ordinary Earth person. Who would? So I just shrug and wipe off a catsup bottle with my towel. But then John does a weird thing. He just touches my arm where Charlie squeezed it, just touches it with the palm of those hands. And the palm's not slimy at all — dry, and sort of cool, and I don't jump or anything. Instead, I remember that beautiful noise when he said his other

name. Then he goes out with three of the men, and the door bangs behind them on a gust of rain because Charlie never fixed the air-stop from when some kids horsing around broke it last spring.

The fourth man stays and questions me: What did the alien say, what did I say. I tell him, but then he starts asking the exact same questions all over again, like he didn't believe me the first time, and that gets me mad. Also, he has this snotty voice, and I see how his eyebrows move when I slip once and accidentally say, "he don't." I might not know what John's muscles mean, but I sure the hell can read those eyebrows. So I get miffed, and pretty soon he leaves and the door bangs behind him.

I finish the catsup and mustard bottles, and Kathy finishes the coffee machine. The radio in the ceiling plays something instrumental, no words, real sad. Kathy and me start to wash down the booths with disinfectant, and because we're doing the same work together and nobody comes in, I finally say to her, "It's funny."

"She says, 'What's funny?'"

"Charlie called that guy 'him' right off. 'I don't got to serve him,' he said. And I thought of him as 'it' at first, least until I had a name to use. But Charlie's the one who threw him out."

Kathy swipes at the back of her booth. "And Charlie's right. That thing

scared me half to death, coming in here like that. And where there's food being served, too." She snorts and sprays on more disinfectant.

Well, she's a flake. Always has been.

"*The National Enquirer*," Kathy goes on, "told how they have all this firepower up there in the big ship that hasn't landed yet. My husband says they could blow us all to smithereens, they're so powerful. I don't know why they even came here. We don't want them. I don't even know why they came, all that way."

"They want to make a difference," I say, but Kathy barrels on ahead, not listening.

"The Pentagon will hold them off, it doesn't matter what weapons they got up there or how much they insist on seeing about our defenses, the Pentagon won't let them get any toe-holds on Earth. That's what my husband says. Blue bastards."

I say, "Will you please shut up?"

She gives me a dirty look and flounces off. I don't care. None of it is anything to me. Only, standing there with the disinfectant in my hand, looking at the dark windows and listening to the music wordless and slow on the radio, I remember that touch on my arm, so light and cool. And I think, they didn't come here with any firepower to blow us all to smithereens. I just don't believe it. But then why did they come? Why come all that way from another star to walk into

Charlie's diner and order a green salad with no dressing from an ordinary Earth person?

Charlie comes out with his keys to unlock the cash register and go over the tapes. I remember the old couple who stiffed me and I curse to myself. Only pie and coffee, but it still comes off my salary. The radio in the ceiling starts playing something else, not the sad song, but nothing snappy neither. It's a love song, about some guy giving and giving and getting treated like dirt. I don't like it.

"Charlie," I say, "what did those government men say to you?"

He looks up from his tapes and scowls, "What do you care?"

"I just want to know."

"And maybe I don't want you to know," he says, and smiles nasty-like. Me asking him has put him in a better mood, the creep. All of sudden I remember what his wife said when she got the stitches, "The only way to get something from Charlie is to let him smack me around a little, and then ask him when I'm down. He'll give me anything when I'm down. He gives me shit if he thinks I'm on top."

I do the rest of the cleanup without saying anything. Charlie swears at the night's take — I know from my tips that it's not much. Kathy teases her hair in front of the mirror behind the doughnuts and pies, and I put down the breakfast menus. But all the time I'm thinking, and I don't much like my thoughts.

Charlie locks up and we all leave. Outside it's stopped raining, but it's still misty and soft, real pretty but too cold. I pull my sweater around myself and in the parking lot, after Kathy's gone, I say, "Charlie."

He stops walking toward his truck. "Yeah?"

I lick my lips. They're all of a sudden dry. It's an experiment, like, what I'm going to say. It's an experiment.

"Charlie. What if those government men hadn't come just then and the ... blue guy hadn't been willing to leave? What would you have done?"

"What do you care?"

I shrug. "I don't care. Just curious. It's *your* place."

"Damn right it's my place!" I could see him scowl, through the mist. "I'd of squashed him flat!"

"And then what? After you squashed him flat, what if the men came then and made a stink?"

"Too bad. It'd be too late by then, huh?" He laughs, and I can see how he's seeing it: the blue guy bleeding on the linoleum, and Charlie standing over him, dusting his hands together.

Charlie laughs again and goes off to his truck, whistling. He has a little bounce to his step. He's still seeing it all, almost like it really *bad* happened. Over his shoulder he calls to me, "They're built like wimps. Or girls. All bone, no muscle. Even *you* must of seen that," and his voice is cheerful. It doesn't have any more anger in

it, or hatred, or anything but a sort of friendliness. I hear him whistle some more, until the truck engine starts up and he peels out of the parking lot, laying rubber like a kid.

I unlock my Chevy. But before I get in, I look up at the sky. Which is really stupid because of course I can't see anything, with all the mists and clouds. No stars.

Maybe Kathy's husband is right. Maybe they do want to blow us all to smithereens. I don't think so, but what the hell difference does it ever make what I think? And all at once I'm furious at John, furiously mad, as furious as I've ever been in my life.

Why does he have to come here, with his birdcalls and his politeness? Why can't they all go someplace else besides here? There must be lots of other places they can go, out of all them bright stars up there behind the clouds. They don't need to come here, here where I need this job and so that means I need Charlie. He's a bully, but I want to look at him and see nothing else but a bully. Nothing else but that. That's all I want to see in Charlie, in the government men — just small-time bullies, nothing special, not a mirror of anything, not a future of anything. Just Charlie. That's all. I won't see nothing else.

I won't.

"I make so little difference," he says.

Yeah. Sure.

Join us in welcoming the "rebirth"

It has always been our feeling that rapid growth poses a unique challenge in publishing. As Warner Books has grown in the past decade—expanding first into mass-market bestsellers, then trade paperbacks and now hardcover—we have been acutely aware of certain subject areas that we've been only touching lightly despite our generally eclectic approach. At the same time, we've been reluctant to simply expand for the sake of expansion, and run the risk of diluting our strengths.

But two years ago we took a very meaningful step when we acquired the Popular Library backlist from CBS. We quickly realized that there was an enormous public appetite for authors like Harper Lee, P.D. James, Ann Beattie, not to mention Helen Van Slyke, Taylor Caldwell, Margaret Atwood, Vilhelm Moberg and so many other fine writers.

More important than specific authors, we spent considerable time studying the whole Popular Library concept. It was a unique imprint that ranged from Mignon Eberhart to Anthony Powell, and yet maintained a consistency of quality which we found appealing. So did book buyers, and our sales soared beyond all expectation.

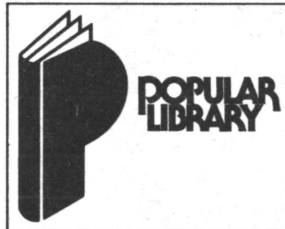
Armed with this knowledge, we sat down to try and combine the strengths of the old Popular Library with some of the newer category trends in paperback publishing today. The result can be seen in the new Popular Library list. It has distinctive original fiction; quality reprints like *Landscape Turned Red*; mysteries of all sorts; a new science-fiction program called Questar, and some old favorites from the original Popular Library such as Anthony Powell.

We believe that this unique blend of titles, aggressively promoted and marketed in the Warner Books tradition, will make the name Popular Library a mainstay of the paperback world once again.

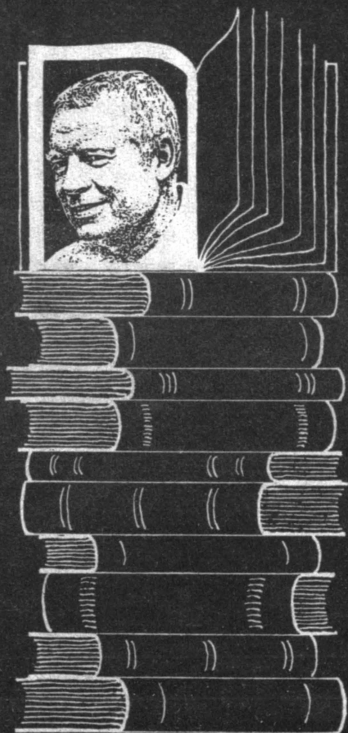


**The Exciting
New Imprint With
a Bestselling Heritage**

of a distinguished imprint.



Books



ALGIS
BUDRYS

The Years of The City, Frederik Pohl, Timescape, \$15.95

The Clarion Awards, Damon Knight, ed., Doubleday, \$11.95

Murder on the Thirty-First Floor, Per Wahlöö, Pantheon, \$2.95

Emergence, David R. Palmer, Bantam, \$2.95

The Talisman, Stephen King and Peter Straub, Viking, \$18.95

As you will know if you're a steady *F&SF* reader, *The Years of The City* is a love-letter to New York City, cast in the form of an SF novel whose chapters form individual episodes in the future history of the Big Apple. What we only had to guess at, however, was how well those episodes would mesh into a larger structure after their original appearance as stories in this magazine. The answer is that the total structure is technically stunning, beautifully various, and the best book from Frederik Pohl in years.

It may be more than that; let us dwell a bit upon the possibility:

SF since Hugo Gernsback has had to find its own way in a conceptual labyrinth. American-bred newsstand-borne pre-Depression "scientifiction" (often abbreviated stf; call it stef) was an accident that is still taking place. Despite the presence in Gernsback's early magazines of reprint material by H.G. Wells and other conscious literary artists, its strongest roots are not literary. It did not mat-

ter to Gernsback how the wondrous ideas were framed, as long as they were listed in a rising order of extrapolation. Nor did it intrinsically matter, I suspect, whether they were listed by being written down on paper rather than described verbally, with many a sly nudge and twinkle, at the monthly meeting of The Coil-Winders' Jape and Tall Tale Club. I rather think in fact that if Gernsback had had access to so much as one hand-held home video camera, that's precisely how they would have been promulgated to the out-of-town audience ... talking-head shots of people sitting around a plywood table littered with gassy vacuum tubes and cooled soldering irons, trading What If tech-talk and having one hell of a good time at the end of a strenuous day of "real" work.

Well, that didn't last. If something's published in prose, people are going to mistake it for a literature of some sort, and so we began to speak of stef as a "literature of ideas," which is a nice catchphrase with hardly any distinct meaning, since it's difficult to imagine what else any literature could be about. But we clung to it for years, and many a new writer entered the field believing it. Eventually, it became in fact as true as any quasitruth can be, simply because we began to pile up so much wordage written under that credo, and so much pontification

embodying it.*

Writers, you see, like other artists, tend to do what they feel is best. They may, to be fashionable or because they actually detect some relevance, repeat some explanations they have heard for why their medium is the way it is. But the explanations always lag behind the thing that sits in a creative mind and — God knows on what basis — says "Thus, and not *thus*." So art evolves, because every artist knows that the judge is capricious and enigmatic, but disobeying the judgment is death. In the 1930s we began to recognize a stef-derived newsstand type of fantasy as well, until, by the 1950s, we began to grope toward the concept of some umbrella — call it SF, or speculative fiction — that would cover "classical" fantasy as well as what John Campbell invented in *Unknown*, and the "scientific romances" that derived from Wollstonecraft, Verne, Wells, and their followers, as well as stef and its evolutions, and perhaps even Kafka, Borges, Calvino and Strete, to say nothing of *Barbarella*.

**The volume and ardor of amateur stefnal study of SF has always been staggering. Endless fanzine essays, and interminable discussions at club meetings and on convention panels, have been a major feature of the SF community landscape since the 1920s. This accumulation of pronouncement must be in inverse ratio to the degree of actual reliability in the agreed-on formulations.*

But this emerged diversity of kinds of SF, even in media supposedly derived in a straight line from *Amazing Stories*, was the diversity attained by people lost in a maze, some within earshot of each other, a few actually in sight of some, none with a plan view. Up to a distant point, that's true in any art, I think, but underneath it all, our art still tends to think of itself as a form of lecture, and that, I think, has had a curious effect.

Actually, it's had any number of curious, characteristic effects, but the one that struck me in reading Pohl's book is that we have very rarely written colloquially and familiarly of day-to-day interpersonal relationships.

"We" is us newsstand-borne writers, such, for particular instance, as Frederik Pohl, whose literary career began in the 1930s pulps and has been wedded to stefnal evolutions as few other careers have. What has happened is that Frederik Pohl, as Futurian fan, as keeper of the stefnal ideological flame, as editor of *Astonishing*, *Super Science*, *Star*, *Galaxy* and *If* as well as other magazines, as SF editor at several book houses, as the top SF literary agent at mid-century, as the author of several overwhelming works of SF, a score of highly important ones, and hundreds of effective ones, is indistinguishable from the stefnal component in today's SF, the thing. If it is happening in our field, Fred either caused it or feels it, probably some of each, and if he has

done something in *F&SF* it is of an even higher order of significance than if Dashiell Hammett or Raymond Chandler had done it in *Black Mask*.

Writing colloquially and familiarly of interpersonal relationships may not seem like something one ought to be firing this sort of salute about. It's done all the time in other fields, particularly in the very best crime writing — in the work of Robert Parker or Elmore Leonard, say, which seems to have evolved from the somewhat cartooney technique of Ed McBain or Donald Westlake.

What do I mean by this? I mean that in stef, in all literatures derived from stef, and for one reason or another in almost all SF literature of any sort, the purpose of the characters is to lend themselves to the higher purpose of the work. All characters in all fiction do that, of course, but only in SF as a general rule is there the assumption that the story is a lecture. Thus, generally in SF while not frequently elsewhere in English-language literature of our day, characters may josh back and forth, may fall in love, may pretend to be having a good time being people, but always behind them the didactic wheels are turning, whether ostensibly in jape or not.

No turning wheel, even on a carnival ride, is free of the promise of crushed fingers. For example, I send you to Futurian SF as written by the mordant young satirists whose genius flowered at the turn of the 1940s and

which culminated in Pohl and Kornbluth's *The Space Merchants* and the Post-Modern "comic inferno" writing of the mid-Fifties. There are plenty of characters in there who strike determinedly proletarian stances and speak as salt-of-the-earth ethnotypes. They stand before us like post-office murals painted by WPA artists and they do, indeed, attempt to edify the Common Man up to the level where he could grasp their artistic concern for all that is good, and pitiable, in him.

Similar orientations appear in Hammett, and more politely in Chandler. Perhaps because they began evolving sooner, and seemed more connectible to "general fiction," they evolved up to the McBain level by the 1950s, and enabled a Leonard to be writing several years ago about a very real-seeming Detroit populated, as it strikingly is in *The Switch*, with people who long ago learned they are never going to get out of this world alive; that one slice through history is all you get, and few of us will ever appear in so much as a footnote.

To see a contemporary SF writer with Pohl's *gestalt* working with the same sort of people in an SF novel, however, is far more remarkable. As I hope I've at least hinted, such people have, up to now, been quintessentially null-stef. Their frequent and often delightful existence in *The Years of The City* seems to me to be far more than an incidental feature of what would

have been a very good book regardless. It is like the appearance of a single star through an overcast, or the first mouse in a granary.

The Clarion Awards is an anthology of stories by new writers who have attended the Clarion SF Workshop. This is the now venerable but we hope still revolutionary summer seminar held at Michigan State University, and you should know that all of them are former students of mine, as well as Kate Wilhelm's and Damon Knight's. Having tussled with all these people, pummelling their egos, drying their tears on occasion, and feeding them high-protein spaghetti when the dorm food became intolerable, I'm hardly in a position to defend any of us against possible charges of incest. (The idea for the book, by the way, came from then-Doubleday editor Al Sarrantonio, one of the respectable number of people in editing and publishing from sea to shining sea who are Clarion graduates.)

As the text of the introductory material does not quite make clear, the "Clarion Awards" are a one-shot thing, with a panel of judges — me among them — voting on the distribution of a (very) modest amount of prize money to the authors of the three best stories in the collection, over and above what all the writers will share in royalties. If the book should take the world by storm, of course, the exercise will be repeated.

An interesting feature here is that the authors were unpublished as of the date Damon sent out his letter soliciting manuscripts. Since that date, which is now pretty far back in history, First Prize winner Lucius Shepard has in fact been appearing frequently, here and elsewhere, and at least Nina Kiriki Hoffman and Dean Wesley Smith among the other competitors are doing well. (Hoffman is selling steadily to the magazines, and has placed high in other competitions, one sponsored by *Writers' Digest* and another by L. Ron Hubbard; she and Smith both have stories in the *Writers of the Future* anthology.) Lois Wickstrom, for another contributor, is quite well known for her feminist semiprofessional periodical, *Pandora*, which has published a great deal of fiction including her own.

The lovable madman of the bunch is second-place winner Gary Shockley, whose "The Coming of The Goonga" is only at the tip of a mind-boggling creative mind that would be knocking the market dead if Shockley weren't so busy in the world of computers; its gain is our notable loss. Another very good piece of work of another sort — not everything from Clarion is SF — is Jan Herschel's "Geometry," Herschel being an Australian with heavy credentials in academe.

Rena Yount's tough and disquieting Third Place winner, "Pursuit of Excellence," rounds out the book,

which contains fourteen stories in all. They're quite good; as usual in a Knight anthology of original stories, the sense is very much like that of a solid issue of *F&SF*.

Knight wonders — we all wonder — how many of these will be famous names a few years from now. That nuance is one of the attractions of a book like this, of course. The immediate point is that if you like good short stories, you will like most of these no matter who wrote them. If, as well, you're interested in becoming a published writer, there's considerable extra interest in these stories.*

With his wife, Maj Sjowall, the late Per Wahlöö authored the Martin Beck detective novel series set in Sweden. No steady reader of these works — *The Laughing Policeman*, *The Locked Room*, *Roseanna*, *The Abominable Man*, etc. — could have helped noticing the strongly antiestablishment flavor that is a large part of their charm for readers accustomed to thinking of Scandinavia as the region of strong, serene, right-thinking individuals.

Writing alone, but already dedicating his work "to Maj," Wahlöö in 1964 published a sort of vest-pocket *Nine-*

**If you would like to know more about Clarion, the boot camp of the literary arts, write to: Mary Sheridan, CLARION, Holmes Hall, Lyman Briggs School, Michigan State University, East Lansing, MI 48824.*

For those who believe there's more to life than meets the eye.

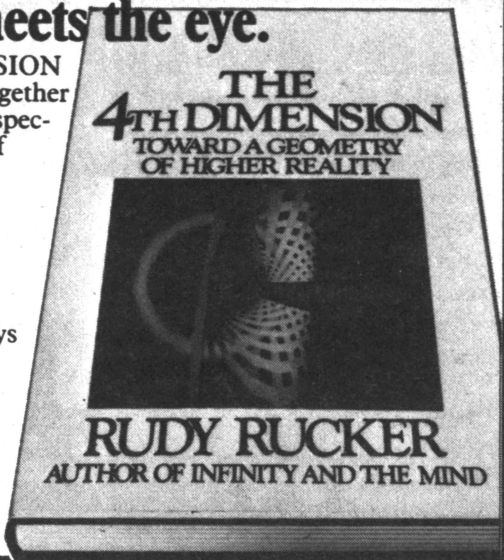
THE FOURTH DIMENSION is the first book to bring together all that has been thought, speculated, seen, and known of higher realities—not only time, but beyond.

"A truly mind-stretching book."—*Library Journal*

"Rare treats. . . sets the reader thinking in new ways on fascinating puzzles."
—*Kirkus Reviews*

\$17.95

At bookstores, or write
SCI-FI, Houghton Mifflin,
2 Park St.,
Boston, Mass. 02108



teen Eighty-Four about a future Sweden whose media are all totally in the grasp of one oligarchic communications empire and whose populace consequently endures — it would say enjoys — complete censorship of its view of the world.

Worked out in detail calculated to horripilate anyone who has ever worked in publishing, and, I hope, anyone who has ever read anything beyond the directions on a pop-top can, this is a small, bitter masterwork. Now published here by Pantheon paperbacks as *Murder on the Thirty-First Floor*, it is in truth too didactic to be a crime novel; it's one of ours, all right, and one to remember.

Emergence has an adolescent he-

roine right out of *Podkayne of Mars*, a wise father-figure right out of all the other Heinlein novels, and, in fact, not one feature that is not a faithful pastiche of Heinlein. Is that all bad, you ask?

No, as a matter of fact *Emergence* is quite an engaging read, well worth one's time, well done, truly steffnal, about survival after Atomigeddon. It also has mutant children in it. Can't go wrong.

On top of that, it's covered by glowing endorsements. "Strongly reminiscent of the best of Heinlein," says Spider Robinson. "Like a combination of *Ridley Walker*, *Rite of Passage* and *Podkayne of Mars*," says David Brin. "An outstanding piece of work, well able to stand with Hugo

and Nebula winners," says Andre Norton.

True. True. All true, if one allows that standing with a Grand Master award does not make of a young man a Grand Master any more than whispering in the confessional makes one a priest.

Go with good fortune, David R. Palmer, author. You have skillfully placed yourself in a well-thought-of box; may it not take you forty-five years to climb out of it.

Pohl and Kornbluth, one or both of them, at least popularized and perhaps invented the ambush method of collaborative writing. Having agreed on at least the bare outline of what their story was, they proceeded to write it by each doing a few pages, getting up and going away, and leaving it for the next guy to figure out what all the sub-plots and minor characters had been planted in there for. Drawing upon resources that years of comradeship and shared apprenticeships had given them, they traded this far-rago of surprises back forth until they were done, and the result was an exciting, gimmicky story with everything but a good ending.

When done as *Gravy Planet*, a.k.a. *The Space Merchants*, it worked remarkably well. It's probably not possible to end such a work roundly;

ideal endings begin on Page One, rooting and branching, whereas such a book in effect provides a brand new Page One every eight pages. But *Gravy Planet* — except for its tacked-on ending — came close to validating the method.

Subsequent work in this mode sometimes got smoother terminal effects, but left far more noticeable frazzles of abandoned characters and aborted plot-threads as the authors zipped along, delighting each other but also cutting each other off at the pass, often so acutely that it would have taken — Heaven forbid! — a second draft to account for or at least decently expunge features that had been cast overboard while the sleigh careened over the taiga just ahead of the wolves.

This has been a review of *The Talisman*, a book in which Peter Straub and Stephen King attempt to work in every effective feature of every memorable story about an adolescent boy on a perilous quest, and succeed after a fashion.

Those who fear that someday a publisher will create a book-writing computer program are starting at the wrong shadow. What is needed is a program that will simulate the public personae of a King or a Straub; the program for creating the text of their work is clearly already in existence.



More magikal mirth 'n mayhem from the creator of **Thieves World™**

Well it seemed like a swell idea at the time...

Thanks to the pervert demon Aahz, Skeeve is now court Magician to Roderick V of Possiltum. And for the first "trick"—all he has to do is magikally stop the largest horde ever imagined.

Undaunted (well, somewhat daunted), Skeeve, Aahz, and Gleep, the baby dragon, invoke the magikal powers of fell wizardry and summon...

an unemployed Imp, a Gargoyle hamburger cook, a narcoleptic Archer, an invisible Blue Gremlin, and Tanda, the All Woman Warrior.

Now it's eight against an empire. But it's going to take a lot more magik to beat those odds.

Once again, Robert Asprin returns to the world of deveels, dragons, and magik in this all new frolicking "myth" adventure.

MYTH CONCEPTIONS

by **Robert Asprin**

AUTHOR OF *ANOTHER FINE MYTH*



\$2.95

**ACE
FANTASY**

This story about a bionic drill instructor and a plebe in a warrior camp in the year 2800 could only have been written by Felix Gotschalk, who has been contributing his distinctive fiction to F&SF for six years, most recently "Conspicuous Consumption," March 1983. Mr. Gotschalk worked as a psychologist for many years; he is now writing full time and working on a mainstream novel.

Vestibular Man

BY

FELIX C. GOTSCHALK

Derek Carlson grew up in the subtropical marshlands of the deep southern U.S. He had never seen anything more mountainous than a fire-ant mound until he went on a class trip to Old Orleans Park with his group of pubescent age-peers one typical steamy day in the late spring of the year 2800. There the boys marveled at the simulated hill, some thirty feet high, constructed in the 1930s, for the half-serious and half-whimsical purpose of letting young children see what a real hill looked like. The Old Orleans area was below sea level, flat and green and mossy as the top of a billiard table, and soggy-springy-resilient, so that digging down as little as a foot or two into the richly impacted loam invariably yielded sulfurous water.

For Derek, visual horizons seemed always to be at eye level and higher, a

linearity to defer to, to look up at; and for him to stand just below the grassy crest of the levee when the great river was at flood stage was to see threateningly high aquatic horizons, as if the entire earth were awash. It was very much like being at sea.

Derek's vestibular organs were set snugly inboard of his slightly flared ear-funnels, the well protected semi-circular canals giving him the comfortable signals of equilibratory quiescence, as well as the infinitely varied topological cues of his precise relationship to his flat spongy home at the bottom of the continent. With low barometric pressure, high heat and humidity, and minimal changes in elevation, Derek's vestibular system had fed him mostly tranquil cues for years. Then puberty school was over, and he was marshaled into war-

rrior training at a camp set high in the Brevard Mountains, a jagged range of new topographic ridges along the famous fault line that had been dormant until the great earthquake of the year 2714. This part of the country was so topographically different from any other part that it triggered an alien sense of fear in Derek, though he had never been there. Now it was to be home for him, at least for a while.

The speeding landskimmer was filled with forty fresh warrior plebes, each young man encapsulated in an impact-neutralizer amniotic sack, and there was a babble of talk as the wedge-shaped skimmer rode on its silicon foils, angled deep down into the energy trough that was now called Azimuth 95, and had been the ancient U.S. Highway 11 that ran from the southwest corner of Virginius all the way to the collapsed Huey Long Bridge in Old Orleans.

"Hey, my ears just popped," a dark-skinned plebe said.

"Swallow hard," said his rack-mate, "it's just the air pressure at these higher levels." Derek swallowed and felt the pops in his own ears. The sensation was faintly pleasurable, but then also ominous. He looked out at the leavening, swollen, whitish cliff-sides looming up from a slate-colored Alabamus River, and realized with exhilarating perceptual clarity that he *was actually looking down on the broad mantle of the land*, something

new in his experience. It gave him a sense of power and pleasure to look out and down on the smooth hills, pine forests, ghost towns, ICBM concrete plains, meandering rivers, filigreed agricultural plots, and geodesic domes. In some areas the kudzu carpet was ten feet deep, like a latticed lava flow of thick vines and leaves.

The skimmer sped straight up the face of the earth, ever nearer to the true, absolute horizontality of the North Pole, accruing latitudinal increments as it swept along; and yet, visually, the generic flatness of the land still cued comfortable and new signals into Derek's perceptual matrices, safe signals that the land was still basically flat, and that he was looking down at it.

"It's like climbing up out of a bowl," Derek said to his rack-mate.

"We're about a thousand feet above sea level already," another plebe said. "That's the same as hanging a thousand feet straight up in the air over the Superdome."

"Denver is five thousand feet above the sea," another said, "and some parts of Mexicalus are nine thousand feet up."

"Wonder how high up the warrior camp is," Derek said.

"About three thousand feet, I hear," a plebe put in.

"God, the top of the world!" yet another voice came through the audio.

"Don't forget the Himalayan chain," a quietly assertive voice came in. "That's thirty thousand." A silence fell over the group, and then the return of the generalized babble, small talk, predictions, jocular rumors, expectations — all the young bull-psyching-up for the manhood rituals and trials that were to come, the programmed experiences codified for all the young men of the area.

Now the skimmer shot along the straight chute at the base of Lookout Mountain, Tennessee Territory, clipped through the northwest corner of Georgia, and began to arc and bend through the gentle mountain domes at the lower end of the old Appalachian Mountains. The air was pure and clear, and far off in the eastern sky, Derek could already see the sawtooth peaks of the Brevard chain, cutting bold purple points up into the vista. These were very new mountains, geologically agonized up out of the earth, rocky extrusions of slate and quartz and granite. Ragged though they looked from this great distance, they were actually soft and treacherous to move upon, terrestrially neophytic, brash sharp embryos among Methuselaic counterparts. Derek wondered why a warrior camp was built in so precarious and isolated a spot, but then knew that some archetypal castles and monasteries were built high in the Swiss Alps and in the Himalayas.

Derek closed his eyes for a few sec-

onds, angled his head just slightly, right and left, and felt the reassuring vestibular fluid level activate the cilia higher up in his semicircular canals, and the corresponding exposure of cilia where the fluid lowered. It continued to fascinate him that this system of closed buds and fluids could make him aware, almost to the exact degree, of the angled position of his head and body. Somesthetic-proprioceptive gravity awareness was very important to him. It articulated his relationship to the graviton matrix, kept him at a proper ninety-degree angle to the flat earth, and defined such factors as gait patterns, postures, setting and hunkering and squatting, slumping or stiffening; the vulnerability of supine sleep, the security of the dextral-fetal curl, or the mashed-face ventrality of prone slumber. To do side-straddle hops in calisthenics class was to splash the vestibular tincture about, like shaking heavy dregs in yellow tea, and this fed back diffuse and disturbing somesthetic cues. To do sit-ups or touch-the-toes was overly pressurizing to the canals, and it was only when the body was at rest that, like heavy oil in sealed beakers, the vestibular fluids sought their gravity-mediated basal quietude of horizontal rest.

Derek bio-fed the faintest microcosmic ripples into his vestibular caverns and felt in command, secure, then suddenly patriotic, even jingoistic. He was going to be a warrior, and

that was a thing of honor. The human body was a marvel of osteal keels, spars, ribs, gussets, fillets, and bulkheads. There were fulcrum-pivots of great power in the coccygeal nest, the lifting lever of the spinal cord, the tibial-femoral extensor, and the flexor patterns of the elbow and wrist joints. To utilize the osteal and muscular kinesthesias of the body in combat was the ultimate paradigm of personal power: to overcome an opponent in unarmed combat, to dominate, to control, to conquer, to triumph. Combat was an ancient practice, perhaps homologous to mock fighting in animals, though animals rarely if ever fought to the death. It remained for man to use his cognition to upset the evolutionary adaptiveness of mock fighting by inventing ritual killings and codes of conduct — in dueling, for example — that carried an insult, minor or egregious, into capstans of encounters that routinely resulted in death or serious injury.

Warfare, too, perhaps singularly, was justified — even glorified — through its sanctioned institutional status, as when hysterical patriotic fervor gripped nations. And though war was condemned on all sides, it was also practiced with sporadic ferocity on all sides. Justification through condemnation, Derek thought. It was oddly invented reasoning somehow; but, once caught up in the mob hysteria, any recourse to sober reasoning drew rage response

from the mob. The power of networked outrage in human groups was remarkably like feeding frenzies in sharks, the waterfall rush of lemmings over an arctic precipice, the thunder of a cattle stampede, or indeed, the networked sputter of reticular outages in epileptic seizure. Once launched, there was no turning back.

Derek slept for an hour or so, a light, pleasing nap, when the jarring stop of the skimmer awakened him. They had arrived at the camp. He stepped from the skimmer, saw the Brevard heights close up, now partially misted over, and before both his feet were yet solidly on the quay, a tomato-faced instructor was nose to nose with him, shouting, flicking plosive microbubbles of spittle on his face. Derek surged in autonomic anger. His was an eighteen-inch world; no person came closer than this, and if so, was repulsed. The private life-space of any citizen included a foot and a half of buffer zone encasing the body. The instructor recognized Derek's response; it was his job to evoke it. Now he shouted in Derek's ear, and in instant reflex, Derek elbowed the man in the ribs. It was a hard, efficient, satisfying blow, and Derek felt the spare rib cave in with a soft, sluicing pop. The instructor let out an odd, airy groan and backed off. Derek dropped into a gunfighter stance, ready for anything, momentarily fueled by hypothalamic fire, and

then he had a cognitive flash, wondering if his striking the man had already washed him out of the training program.

"Stand at attention," the instructor said, his voice at neutral command level. "I am bionic. I could kill you easily. Do you read me? *Do you read me, Plebe?*" The instructor grasped Derek's elbow and squeezed it. Derek gasped and almost fainted at the pain. He stood at attention and steeled himself for a retaliatory blow, but it did not come. He riveted his eyes on the low white barracks across the quad and felt tears of pain well up. Then the instructor strode off, down the gathering line of young men, his bulging triceps clearly visible beneath his beige-colored bodysuit. Three other instructors were moving about, pushing the plebes, shouting at them, insulting them in nose-to-nose postures. Derek closed his eyes and began to sway. At the far end of the line, a portly plebe was shouting back at an instructor in a curiously loud, yet timorous, grating voice.

"Yes, sir!"

"I can't hear you!"

"Yes, *str!*"

"Sing it out, you baby plebe!"

"Yo! Affirm! Yessir!" The vocal feeling tones of the instructors came through like jabs to the body and face: dartlike, quick, immobilizing, inexorable. The intensity of the stimulus disarrayed normal response repertoires, so that Derek and his peer-plebes

were obliterated by the action. Even the strongest of these young men, the boldest, most secure, most dominant, offered no overt resistance. Physical strength was no recourse, no invariant kinesthetic force. Many of the young plebes were, at least temporarily, cataleptically weak and flaccid. Far down the rank, a thin boy's knees buckled, and he sank slowly to the ground, as if keeling to pray.

"Don't touch him!" the tomato-faced instructor bellowed. "Let him be!" He strode over to where the boy lay on his side, beginning to draw into a soft fetal curl. Without a word, he lifted the boy into a fireman's carry position, as easily as if the boy were a kitten or a blanket, or a light sack of flour. The instructor's body showed absolutely no sense of the burden, no visible allowance for the weight of the boy's 160 or so pounds as he made his effortless saunter across the quad. As if adjusting an epaulet, or simply shrugging, the instructor loosed the boy into a shallow stone fountain, and the boy fairly exploded into life with the shock of the cold water, which Derek later discovered to be kept at forty-two degrees Fahrenheit. It was July, and hot, but the waters of the fountain were kept chillingly cold. Two relatively unimpressive-looking bionic figures came out of the barracks and took the drenched but invigorated plebe inside.

"Who else needs a cold bath?" the

tomato-faced warrior-instructor yelled, his authoritarian tone ringing down the line of men like a single audible hand slapping every face. "Who wants to faint? Any thumbsuckers here? Any tantrum-pitchers?" He said these last words with such consummate articulatory clarity, such plosive consonance, that the inanity of the connotation fled in the face of the thrusting timbre of its deliverance. The words were flinty particles to duck away from, warning drums, snarls from a stone ledge above one's head, heavy rustling in saw grass, screams of pop-off valves, trumpetings at sacrificial rites. The voice is bionic, Derek concluded, like an air horn on a car, or a siren, or a ship's whistle. No human voice could produce such controlled explosions, such surges of power.

Now the voice modulated to quieter levels, but still very much command quality: "You men are barely dry behind the ears. Fresh young cubs straight from the maternal breast...." Here Derek wondered at the word-choice; much cruder levels of reference came to his mind. "...little foxes just out of the den, babies protected by parents. Up until now, perhaps until this very day, you have been nurtured. People have been assigned to protect you. Society has been charged with your advocacy. It is the function of the warrior to *fight*, and by the gods, you will be fighters, or you will return home to

nurse at the breast. To be a fighter is to know freedom from fear, to forge your body into a combat machine that has but one destiny, and that is the vanquishment of an enemy. You will develop new spirits here, new cores of confidence, new orientations. Some of you will become permanent members of the warrior caste, and be greatly rewarded for your actions. The expectation level is high, and will cull out the weaker among you, separate the men from the boys, weed out the few that we need for permanent service — Hey, where's the brash kid that tried to cave in my ribs?"

Derek's stomach churned, and he felt a tinny ringing germinate in his ears. He had been temporarily lulled by the intelligent turn of the instructor's talk. Now Derek fancied his vestibular cochlear shells as cringing fetuses with watery piping systems.

"Hey, Samson! Hercules! Hey, boy hero, get your ass out here so the rest of these boys can have a look-see at you!"

Derek stepped forward, hesitatingly, and the instructor brusquely motioned him forward. He's going to stomp the shit out of me, Derek thought, but he was strangely unafraid. I could cower and slink, he thought, but I'm beyond that. I'll take him any way I can. He's not going to kill me. Then Derek felt the ordinary contempt reaction to bionic people,

and saw the instructor as a mere device to outwit, if not eventually conquer. There was something about biohumans that reduced their generic credibility. One wanted always to test their bonic mettle, to bushwhack them, to prod their limits; because, at least in the full bionics and robots, no inappropriate retaliatory response would be forthcoming, since biones and robots were eminently *fair*, by law and precedent and construction. Once, Derek had seen a tiny boy tease a sanitation robot unmercifully, with no response from the bot. Finally, when the boy tried to trip the bot, it gave the boy an eye-rattling electroshock that dramatically validated the robot's dominance.

Derek decided to close with the instructor. "Come on, puppy," the instructor snarled, "come get your ass whipped." It was a desperation move on Derek's part. Bravery is a form of stupidity, he thought as he approached the man on the balls of his feet, still feeling no fear. He's stuffed full of Akai transistors, Derek thought, and aimed a haymaker at the man's mandibular joint, just forward of the ear and low on the jawline, hoping for a quick break of this vulnerable fulcrum. For a moment he forgot that this was no ordinary man, and sold short on the assurance that biones were a minority group (and thus scapegoatable). In the flash of a microsecond, the looming facial target was gone, and the inertia of Derek's

swing spun him off balance. The instructor had ducked the punch with incredible agility and reflexive speed. Derek thought of tiger cubs teasing cobras, the reflexes of the cats all but guaranteeing their safety.

"Now see this!" the instructor trumpeted to the row of young men. "This is how tough I am." And he clamped a single bionic hand around Derek's elbow. Again Derek gasped, and wilted in the machinelike power of the grip. He cried out — a strangling, air-bellows, laryngeal moan — and hung, like a limp puppet, in the grip. It was as if every tendon in his body were soft as taffy strands. The pain panicked him, and his very life-sense flared in his elbow joint, as if giant pliers were crushing the frail osteal wing. His vestibular cues flared alarm, overload, critical mass, redline, in extremis, and he fainted.

He came awake, just seconds later, in an infusive shock of icy immersion, and knew, with immediate, blue-steel clarity, that he was in the waters of the stone fountain. His equilibratory centers gave him to know he was supine, and he rolled dextral, drew up his knees, and just barely fought off the urge to open his mouth, the icy waters inundating the base of the occipital lobe, keying in this often fatal reflex. His feet touched the bottom of the shallow pool, and he felt a new and temporarily commanding power over his lifespace. He sprang from the bottom of the shallow fountain and

broke the surface like a breaching whale. He heard the cheers of the men, and then the two drone-level biones lifted him out and took him inside the barracks. He was something of a hero in the eyes of the other plebes.

The new plebes, the vestigial warriors, were lined up and marched to an ancient-looking tin-shed building called HYGIENIC UNIT. Waves of heat shimmered in the air above the roof, and Derek thought the place to resemble the camp buildings of Buchenwald or Auschwitz. Inside the men were told to strip naked and to put their clothing and possessions in heavy canvas bags. One plebe asked what to do with the \$491 in barter-script he had brought with him, and was told to dump it with everything else, that he would get a receipt for it, and that he wouldn't need any script where he was going, that he was a nipple-head to carry that amount around with him, and finally, that the government was going to do all his worrying for him. Derek had traveled light: jockey shorts, cotton jeans, tennis shirt, socks, soft shoes, a handkerchief, a thin wallet, and a few coins. The filled canvas bags were fluxed shut, and as each man hefted his onto a corner, a boinic drone affixed an ID plate and gave the men a small receipt plate. The naked men were then lined up against the corru-

gated metal walls, twenty on one side of the room, and twenty on the other. Forty naked young men in one room, Derek realized, and the scene was without precedent in his experience. He could not help but appraise the bodies of the men, to compare the somatotypes with his own. There were a few plump ones, their bodies remarkably feminine, and Derek had a memory-trace of cabin boys and sodomy in the British navy in ancient times. Given an imprisoned sample of men, with no access to women, and the intromissive drives still sought culmination, and it was a matter of targeting in on female surrogates and alternative apertures. There were thin, asthenic boys, with every muscle visible beneath thin skin; a few hairy mesomorphs; at least one heavily muscled bodybuilder stereotype — in all, a seemingly endless variation of body sizes, shapes, and proportions. And every penis hung flaccid and somesthetically numb. Into this thin metal cage of fish-belly white vulnerability strode the tomato-faced drill instructor, the "D.I."

"All right, you shitbirds," he belowered, "this row, LEFT FACE! And over here — yeah, Plebe, face to the left — *you* baby plebes, RIGHT FACE!" Some of the men knew nothing at all of close-order drill, but others performed the movements snappily. A door opened in the face of the corrugated tin wall, and Derek could see into a small room, the floor of

which was covered with *batr*. It was, he realized, a makeshift barbershop, an absurd tonsorial palace, a hirsute grooming station, an emasculation parlor, an evolutionary precursor of medical surgery. In places the hair was a foot deep on the floor. There were convoluted clumps of ebony wire, brown thatch, auburn swatches, kinky ebony plumage, coppery red wires, greasy duckback residuals, coiled swirls of blond locks — in all, a weird instant rug of freshly cut hair, from the heads of innumerable young men.

The haircut did not take very long: Derek sat in the smooth wooden chair, careful not to mash his soft scrotal walnuts, and the barber man made a few quick swaths across his head, with a heavy shaver that sounded loud enough to cut wire. Derek rubbed his hand across his head and felt the bony vulnerability of total baldness. Where there had been luxuriant hair, perhaps fifty thousand individual long hairs, there was now tight skin, keenly etched cranial fissures, osteal bumps he didn't know he had, piebald marks, excoriated pustules, stubble, epidermal oil, sebaceous dew, and most of all, the primal white skin. Derek had never felt more neutered in his life. He was a eunuch, a Samson shorn of his locks, a virility symbol suddenly rendered impotent, a grassy carpet clean cut from the earth, revealing the barest worn, hard, sterile dirt.

Quickly the forty men became cranially homogenized, their identities gone, individualities neutralized, charismatic covariances canceled. There seemed to be no pecking order now. A massively built, lantern-jawed boy was opposite Derek as the group lined up once more, and the boy looked innocuous, harmless, pathetic.

Derek's vestibular nests seemed like terminal message stations, relaying to him in the keenest wavelengths those routine graviton-matrix cues he took so much for granted. His richly sensitized footpads felt the individual cubes of grit on the curiously warm cement floor (deck, you shit-birds, it's a *deck*!), and he could feel the infinitesimal ebbings of cochlear fluid in his semicircular canals as his locus of balance shifted slowly from heel to ball, then up along the outboard calves, to the thighs; the staunchly underpinned pelvic girdle, the snakelike tubings of cradled viscera, the cautiously throbbing heart, the rib-box with its bladders of precious air, the pylon of the cervical post, and the bony crown of the skull with its cheesy gray furrows of brain mass.

"Move it!" the instructor belowered, and Derek's column of men moved into a shower room, where the similarity to a Buchenwald gas-chamber was institutionally unmistakable. Would stinging sprays of water erupt from those grayish green shower heads, Derek thought, or mists of

poison gas? He discovered rapidly enough, and even felt triumphant, as he adjusted the water spray to warm. A few of the men turned the metal knobs to hot, and the room began to fill with steam. The soap was hard, brownish-colored, strong, and yielded a bare minimum of lather. The instructor left the men in the room, and there were careful chitterings of babble-talk, an occasional whoop, and an increasing din of moderate yips and whistles and plosive sputterings. The scene was Dantesque: wet white bodies, hairy chests, bare chests, circumcized phalluses, uncircumcized phalluses, bulging pectorals, bird-chests, tight bellies with well-defined muscles, flaccid paunches, varicose veins, drowned pubic sporrans, sagging varicoceles, scars, moles, prurient pustules, freckles, piebald filigrees — a bizarre, noncontextual amalgam of basic bipedal humanoid bodies, all humbled and homogenized by nakedness, wetness, waterproofed cleanliness, and shaved craniums. After ten minutes the D.I. bellowed for the men to get out. A muffin-faced ectomorph named Hovorka was trying to soap his phallus into tumescence, but with little success. As the men emerged from the shower room, they were issued a stack of four thick green towels, green dungaree pants, loose jackets, and soft-billed caps. The clothing was stiff and substantial, and Derek felt like a grubworm encased in a denim exoskeleton. With

damp towels around their necks, thick socks and heavy brogan shoes on their feet, and hefting the canvas bags now stuffed with underwear, bedding, and toilet articles, the men were marched to the barracks. I don't feel like a warrior at all, Derek thought, looking at the drab, slumping, shuffling column of men in front of him. I feel like a convict, a conscript, a drone, a laborer, a mental patient in some ancient, snake-pit hospital, with confining pens and drain rooms.

The barracks room was like a cement vault some one hundred feet long and forty feet wide, with wooden floors (*deck*, you shitbird!), a great many windows, and lined with ancient iron double-decker bunks. Derek had been accustomed to sleeping on graviton chaises, in gelatinous coffins, or on filmy forcefield beds, and he wondered at the primitiveness of the olive drab bunks and their thin mattresses.

"Find a sack," the tomato-faced D.I. said, and the shuffling of the men toward the beds suggested a mass game of musical chairs. The pattern of instant response to command was already becoming obvious. When the bionic D.I. said shit, the instant response was to squat and strain.

How the hell did I get into this, Derek asked himself, stashing his gear on the wooden locker box beneath the bunk, and easing down onto the mattress. A curious, disproportionate sense of security accrued from the

simple feel of the moderately resilient mattress. Why do young men fight the wars started by old men? he wondered; how is it that patriotism is so exploited, why should I be a warrior, anyway?

"Chow in half an hour," the D.I. barked, and left, his stride rapid and powerful and sure, his body a deadly strong device. Derek watched the disappearing figure with a mixture of admiration and scorn. No mere human could control men so totally, he thought. Half bones and flesh, blood and tendons, half circuit-paks and nuclear cubes, He almost said it aloud: Suppose one of his circuits failed? Would he be like a puppet with cut strings? Derek lay supine on the bunk and closed his eyes, relishing the absence of visual cues. He felt the keel of his spinal cord settle into the mattress; the arches of his ribbed bone-box became the crests of hills, his extremities were peninsulas, his genital stalk a detumescent sprig, and his head a quiescent cognition terminal. Deep inside his vestibular nests, the eternal equilibratory fluid now lay ninety degrees from verticality, and it gave him to know both the comfort as well as the ventral vulnerability of supinity. Across the squad bay, a thick Bronx accent curled out its street-smart denotations, and was answered by a whanging, colloquial Southern drawl. A mulatto-looking Italian boy was reviving the 1860s U.S. Civil War with a jingle-jawed Kentucky plow-

boy. A wrist-wrestling match formed up, and the Kentuckian took the Bronxite easily, the plowboy's small biceps belying the strength of his wrists and hands. He allowed that milking cows was what had made him so strong. The lunch was a rush of lines, rattling metal trays, steak and potatoes and milk and cake, and what every young man came to believe in for the rest of his life: something called saltpeter, put in all the food, to keep you from getting penile erections. Derek's first day in warrior training passed in a frantic blur of diffuse and, for him, aimless actions.

Next morning the reveille bugle blew at 5:45 A.M., and the men bounded from their beds. Most wore towels around their waists (nudity was not explicitly disallowed, but turned out to be rare among the young warrior-striplings) as they shuffled to the shower room, and then stood before the line of mirrors to shave and brush their teeth. A radio blared syrupy commercials and unobtrusive music, and Derek thought how soft and easy the deejay's life must be. Up and down the line of men, there were ancient shaving mugs and brushes, pressurized foam in cans, fat white worms of cream in tubes, the raucous buzzing of electric shavers, tooth brushing sounds, hawking, spitting, snorting, a conglomerate of mass toilet sounds, all amplified in the resonant concrete

room. Then back to the squad bay to pull on the stiff denim uniforms, and out into the early sunrise to muster into ragged ranks.

The bionic D.I. strode from his billet across from the barracks. He was dressed in light-colored khaki, soft-looking, an often-laundered look, a "salty" look that was the mark of his tenure. Bionic shit, Derek thought, mannequin, waxwood figurine, plastic monster, breeding fault, curiosity; and yet the charismatic force the D.I. exuded was ineluctable. The voice barked and rolled, and the men came to attention in a kind of reversed collapsing movement, like old movies played backward. The platoon of men shuffled off toward the mess hall, where they were again rushed past the sullen-angry messboys, who filled their trays with scrambled eggs, thick bacon, grits, fried potatoes, bread, and butter. On the tables were metal jars of milk and coffee. The men set about the business of eating with vigor and speed, fueling their young bodies, swelling their intestines, inducing rhythmic peristalsis, elevating blood-sugar levels; and the feeling of satiety was good and right and best and natural. The mess hall was filled with several hundred men, and the sounds were metallic and clicking, sloshing and swishing, babbling and murmuring, and yet serious and subdued.

At least we are not harrassed when we eat, Derek thought, and then he

saw the D.I. patrolling the aisles. I wonder if he eats, he thought, and the thought was a mental smirk. I bet he puts fuel-paks in his gut instead. I bet he eats iron and zinc and lithium and silicon grease. That means he doesn't shit, either. He probably has some kind of exhaust port, some spring-loaded valve he had to take out and clean with an air hose every month. The D.I. moved close to Derek, and there was the all but imperceptible whirl of tungsten helices in ambergris fulcra-paks. *Macbine*, Derek thought.

"How's the chow, hero boy?" the D.I. asked Derek, the voice interrogatory and cruel, yet with a sliver of sincerity coming through. Derek swallowed a piece of thick bacon. It tasted full and salty and complex, a genuine blastula of compressed fuel.

"Good," he answered, looking up at the aminoplast mouth, the absolute symmetry of the nasal ports, the steady look of the steely bright visual agates.

"You don't have a worry in the world, boy," the D.I. said, beginning to walk away, "the government's going to feed you like a king."

It was the man's bionic status that *offended* him, Derek realized. I am organic, he said to himself, I am colloidal, humanoid, *alive*, vestibular, *aware aware aware*, and he is machinated, quasi-organic, para-android, a windup tin soldier. Derek could not escape the now diffuse strategems of how he might set about dysfunctioning the D.I.

A long, hot, compacted month passed. The men learned close-order drill, the manual of arms, the saber manual, the anatomy and physiology of weapons, dirty fighting, ancient bayonet combat, judo, karate, and even medieval Scottish wrestling. They marched; they ran obstacle courses; climbed hemp ropes thick as billy clubs, dove through blind holes in walls (there was a mudhole on the other side of the wall); they crawled, supine, beneath barbed-wire screens while machine-gun bullets whistled just above them; jumped from platforms into water topped by blazing oil; boxed each other with gloves and with padded staff; they fainted and dodged, crouched and sprang, struck and parried, rolled and lunged, galloped and stalked; crawled, inched, skewered, and insinuated their young bodies in so many ways that Derek felt he knew every way to fight a man hand to hand. He knew the trick of breaking a jaw, crushing a windpipe, eye gouging, testicle ramming, and hitting always below the belt. He knew how to bite and spit and twist and wrench, and began to wonder if being a warrior meant anything other than hand-to-hand combat. Then came the introduction to the history of weapons.

The men fired the ancient .22-caliber rifle; the 1906 rifle, the World War II Garand; the carbine; Browning automatic rifle; air-cooled and water-jacketed machine guns; the heavy,

bucking, inaccurate .45-caliber pistol; and the infamous, torquing Thompson submachine gun. Then came the M-12 series, the M-16, M-18, and M-24, each one deadlier in the sense of the number of projectiles it could spit per unit of time. They fired the recoilless rifle, the mercilessly recoiling grenade launcher, the stovepipe bazooka, and the fat stovepipe mortars. They were getting into the laser weapons now, and the D.I. had harassed Derek more than the other men. Derek did not have bad blood feelings for the D.I., but he came increasingly to see him as a personal challenge. Here was a smart machine to outwit.

One fiercely baking August day, Derek saw a rheostat knob flush on the D.I.'s belly, as the instructor led the platoon in a grueling calisthenics session. Ah, there's his switch, Derek thought, there's his power knob. I wonder if he turns it off at night. I wonder if he has to plug into a recharger while he sleeps — *if* he sleeps. Men are the masters of their machines, he thought, and the thought of dysfunctioning the D.I. grew stronger in him. Again, it wasn't out of hate, it was rather to show that humans outrank bionics. Machines work for people, he concluded immediately, they may not oppress us, they respond *to* us. They pump and they churn, they reciprocate their pistons and turbine-spin their fluted blades, and at our specific whims. It is the routine option of the man to

control his machine.

That night Derek did a reckless thing. He crept from his bunk in the dark, circled the barracks to avoid the sentry placed on fire-watch duty, and climbed an asbestos-wrapped pipe to peer into the D.I.'s quarters. The room looked like a machine shop and a spare-parts storehouse for electronic hardware. The D.I. was stripped. Derek had never seen him naked before. He clung to the large, warm pipe outside the window, his bare feet hurting, thrust against a thick plastic collar that held the pipe to the wall. The D.I.'s back was to him, a broad back, but one sectioned like the thorax of an insect. Exoskeletal dung beetle, Derek thought; roach, scarab, segmented lobster. The D.I.'s deltoids shone like geodesic epaulets, the trapezius muscles were like gussets on an aircraft fuselage, and the lats like retracted wings on ancient delta-shaped jet planes. A plasticized corset encircled the waist, and the pelvic girdle was that of a store-window mannequin. Polystyrene training pants, Derek thought, Pampers for a machine. A complex network of external tendon-prostheses connected the waistline to the rear of the knees. He's a damned puppet, Derek said softly, and the D.I.'s torso began to swivel, like a turntable in an antique railroad roundhouse.

It was so rare a sight that Derek's breathing stopped. The torso swiveled ninety degrees starboard, and the D.I's

arm moved to lubricate two grease nipples on the pelvic ridge, exposed like drainage nodules in a garbage-disposal sump. A small square of epithelium had been removed from the side of his face, and where teeth and jawbone should have been showing through, there was microcircuitry. One muscular arm hung slack, like a girder being lifted into place by its end, and the other seemed curiously alive, the movements rapid, certain, perfectly synchronized. The calves were crosshatched with bindings that appeared to be embedded in the mass of the leg.

Derek saw the room as alien. It had no prettifiers in it: no furniture, no plants, no pictures, no books, no stereo, records, rugs, ashtrays, dishes, no signs of food, no papers, pencils, pets, or lamps. He lives in a spare-parts room, Derek thought; he has to stay garaged in a maintenance shack. No toilet or sink, no tub or shower, no stove or refrigerator, no bread, grapes, wine, peanuts, or molasses. He began to feel sorry for the D.I. The torso swiveled back to its normal position, and the other flaccid arm came alive, reaching for a snaking conduit that led along the gritty floor and into the shadows. The D.I.'s head had not moved at all, and his feet remained in place, like those of a statue on its base.

Then the head turned, smoothly, like a signal-seeking radar dish, and the pair of faceted eyes looked up,

directly at Derek. The facial expression was curiously slack, like a person who has had a stroke, and then it turned very human and leering. The aminoplast mouth moved, and Derek heard a voice inside his head, as if a microcassette had been implanted in his inner ear. The voice said, GET IN HERE, HERO BOY.

It was all Derek could do to prevent his body from going to jelly. He clung to the pipe and forced his body to respond, descending carefully, his breath now coming in dysrhythmic snorts. The tone of the voice had been commanding, and yet matter-of-fact, a quiet, casual order. There was no anger or indignation in it, neither was it colorlessly robotic. Derek imagined he had heard a fleeting nuance of camaraderie in the command, as if he was now privy to some secret. He felt the spongy turf beneath his bare feet, and the grass whispered there, quickly dampening the complexly vascular podiatric pads, so sensitively keyed into his vestibular pods. The only sound he heard was the soft hiss of the wrapped steam lines, and then the call of a bobwhite, far off.

"What are you, some kind of fucking *voyeur*?" the D.I. said, as Derek entered the room and closed the door. The word sounded too soft, an affectedly onomatopoeic sound. For that matter, the word *fucking* was too fleshy a sound for a nonflesh bionic I.D. to use.

"I was damnably curious about

you, I'll have to admit," Derek said. "I'll take whatever's coming to me." He did not feel fearful. Certain kinds of men can induce fear, but no bione could. The D.I. quickly replaced the missing part of his face, and dressed quickly in pants and shirt. He doesn't have to put on his clothes, Derek thought, but then the uniform presented an authoritarian set.

"We can't have plebes climbing up steam pipes and doing Peeping Tom numbers," the D.I. said, moving toward him. "Stand at attention." Derek liked to snap his heels together in this stance, the valid impact-clack of thick leather shoes, but now the movement felt silly and hurt his bare heels. Beneath his feet, the floor (*deck*, shithead!) felt like a gritty hatch on a rusting Lebanese freighter. The strange metallic room sang soft electronic soprano songs, and somewhere along one wall (*bulkead*, you shithead!), a relay closed and opened in rhythmic tickings. The D.I. walked behind Derek. "Eyes front," he said, again softly authoritarian. "You're a fair strapping young buck." The voice came from behind, the umbilical conduit moving to compensate for the change in position, and then the D.I. moved back to face Derek. "You figure you can whip my ass?" The voice was not nearly so baiting in its effect as it would have been coming from another man.

"No, *str*," Derek said, his voice too loud in the resonant room. A hol-

low steel pole support column nearby rang with the volume of his reply.

"What kind of trouble are you looking for, sneaking around like a second-story man in the middle of the night? Stand at ease."

"I'm curious about you. I never saw a superhuman person before." The flexible conduit was attached to the D.I.'s umbilical plug, like a high-pressure fuel line. He's getting recharged, Derek thought to himself.

"You looking for some way to get at me?"

"I don't see any way, sir. If you can't beat 'em, join 'em."

"You resent biones?"

"I guess I resent your invincibility."

"That's what makes me a D.I., Plebe. My job is to make you invincible. You buy that?"

"I guess any man wants to be invincible."

"You volunteer or get conscripted?"

"Conscripted."

"Where you from, hero boy?"

"Old Orleans."

"You got any bionics in you?"

"Some plastic knee cartilage."

"How much of a bione you figure I am?"

"You look like a 90-percenter to me."

"Ninety-seven," the D.I. said. "You have your original memory banks? You had any erasures?"

"No, sir."

"Then listen good. I was hit by a commuter cab when I was ten tiers old. The impact jellied my brain. My guardians bartered my body to the Gladiator Service in exchange for life-long pensions. I got a modified George Patton person implant, and a set of kinesthetic paks that make me strong as a gorilla. I can squat with 2,000 pounds, bench-press 1,000, reverse-curl 250, and do the hundred-yard dash in five flat. I can fire offhand bull's-eyes at 1,000 yards."

"Christ," Derek muttered, unbelieving.

"I can field-strip an '06 in forty-seven seconds, and categorize tactical philosophies from Genghis Khan through Rommel and Rickover and Haig. My data banks recapitulate the history of warfare."

"Why are you telling me this?" Derek asked, with some growing feelings of empathy. "Why not just discipline me and get on with it?"

"I am validating my dominance," the D.I. said. "If you have any doubts about it, put them aside. As for discipline, you don't know the half of it, hero boy. You've got too much self-actualization in you to make much of a gladiator. What you need is a good shot of hypothalamic amperage." The D.I. moved toward a cabinet, and Derek had an old memory-trace of a dentist reaching into the sterile tray for the huge Novocain syringe. His first instinct was to run, and then he saw the hatchet. It was rusty and lay

on a lathe-bed, as if unused for tiers. The conduit that connected the D.I.'s umbilicus to the recesses beneath the metal credenza lay like a fat snake sleeping in the sun. The conduit rotated easily in the abdominal socket as the D.I. reached into the cabinet. He palmed a small phaser and turned toward Derek.

No machine is going to zap me, Derek thought, and in one fluid motion, born of reflex-level survival instinct, he snatched the hatchet from the lathe and swung it in both hands at the fat snake-conduit on the metal floor (*deck*, shithead!). The old blade bit into resilient rubber, fiber, polyester web, and then into the bright pure metallic strands carrying the recharging current. The floor rang with the impact of the blow, and burst of blue sparks spat up in Derek's face, taking away half his eyebrow. A shock electrified his body, rattling every rib. The dry wooden handle of the hatchet had saved him from a serious shock. The shock served as a reflex-arc stimulus for repeated blows, and he screamed ancient karate cries as the fourth blow severed the conduit. The sparks flashed orange and amber, then died in an acrid little plume of smoke. The D.I. stood, like a Colossus of Rhodes statue, as if his feet were bolted to the floor. His head began to turn very slowly, and it rotated a full 180 degrees, and looked at Derek. The face looked out at him, and the shoulder blade surrogates were where

the pectorals should have been. The sight of the dorsol torso and the ventral head horrified Derek. Very slowly, the D.I. began to sink to his knees, like a massive steel puppet being lowered by taut cables.

"A stupid move, hero boy." The voice was pitched lower, the cadence slowed. "Destruction of government property, umbilical assault, trespass, military maladaptive behaviors. Your organic ass is going straight to the brig." The D.I.'s arms began to draw up, so that the forearms were extraordinarily parallel to the upper arms, far more so than possible in humans. Across the room a bank of oscillographic screens flashed bright red bars, and the bell-shaped Gaussian tracings there decremented to gentle excurvatures, and then flattened into horizontal lines.

"I'm going on nonverbal." The voice was even lower, slower, and softer. "Your vestibular ass is mud, hero boy." The D.I.'s calves drew up behind his thighs, again in the bizarre mechanical sense of absolute parallelism, and Derek marveled and disbelieved what he saw: the torso was sinking to the floor, and the thighs retracting into it. The torso cylinder was encasing the extremity-pistons. Then came the supreme horror. The head itself began to lower down into the thoracic cavity. At the cervical base, annealed stitch-patterns parted and closed, like flexible sliding doors, like irisng ports, and the head disappeared into the thorax.

"Christ," Derek said aloud, "he's retracted into himself." He spun on the metal floor and felt the grit abrade his feet. He walked quickly to the door, drew it open rapidly, slipped out into the humid darkness, and closed the door. He loped slowly through the grass, and the dew immediately watered his feet in familiar, cold, total immersion. The fire-watch sentry was at the far end of the barracks, his dimly luminous helmet glowing, and Derek's feet left damply fading prints as he made for his bunk. He crept silently into the metal-framed bed, breathing louder than he wanted to, and drew the light blanket up over him. From the bunk above came the slow chittering purr of a man snoring. Derek held his breath as the fire-watch sentry padded by. The distant echo-call of the bobwhite sounded, and Derek felt a kinship with the bird. I am one of God's most vulnerable creatures, he thought, and so is the bird. The D.I. is a faulty block of machinery. He felt triumphant, despite his fear of both immediate and ultimate discovery, and he slept well, dreaming of high-speed, low-altitude flights over complexly bristling megalopolitan vistas.

Word of the incident spread rapidly. The fire-watch reported to the D.I.'s quarters at 5:30 A.M., got no response, entered, and saw the overtly squared torso on the floor. He alerted

the assistant D.I. (a 32-percent bi-one), who called the post commander (a 12-percenter). The fire-watch was a scrawny, sociosyntonic, bird-faced boy from West Virginus, who delighted in telling what he saw. "By God, his belly-button string was cut plumb in two. His head was By God down in his chest, and his arms and legs were folded up like broken branches. He was By God on the floor like an old packing crate By God."

After breakfast, the men were confined to their barracks and instructed to field-strip their archaic Garands until further notice. At the noon mess call formation, the post commander himself addressed the entire battalion, the twelve platoons ranked up six abreast and two deep. The post commander was short, thick, muscular, with a salt-and-pepper-colored handlebar mustache, and his chest was embroidered with four equal rows of campaign bars. The silver eagles of his rank lay supine on his khaki epaulets and vertical on his pisscutter cap. The men were hungry and restive, but intent on his words.

"Sergeant S-5 Alpha 430 was maliciously deactivated sometime between 10 P.M. last night and 5:30 A.M. this morning, by person or persons unknown. Sergeant Alpha 430 is a gladitorial bione of the highest order. He represents a government investment in the range of 8 million preferred barter-script units. It is our assumption that one or more of you men

committed this action, but we have no suspects as yet. If any one man jack of you here has information about this, you are ordered to report it at once. The Bionics Guild has already authorized a twenty-five-thousand-unit reward for information leading to the arrest and conviction of the perpetrators. This is no matter of simple personal assault. A valuable item of government property has been damaged — quite extensively, I might add — and the persons responsible must be apprehended. That is all. Platoon leaders, carry on!"

Oh, shit, Derek thought, as the men trooped into the resonant mess hall, I will be suspected. But I will lie, and if they break me, I will claim self-defense. That D.I. box of transistorized pneumoplast was going to zap me with a phaser.

A large number of the plebes had witnessed Derek's two encounters with the D.I., and so when Derek was summoned to the post commander's quarters the next day, he was not surprised, nor did he suspect any particular informant. With a quickly posted reward of twenty-five thousand units, he even thought there might have been a torrent of early informants. Derek ran through his plan again: he was to deny the incident, plead self-defense if clearly discovered, and give as his base of defense the fact that the D.I. had violated the ancient and honorable robotic code by pointing a phaser at him. He was not accustomed

to lying, but felt this a justifiable first line of defense. After all, he was merely protecting himself from a malfunctioning machine. One need not have a code of honor when dealing with a machine. His denial would be strategic, the confession objective, and the circumstances extenuating. But Derek did not reckon on the cruel sophistication of the interrogation process, nor did he expect it to begin with such startling suddenness.

He entered the commandant's office and was immediately phaser-stunned by an MP standing behind the door. He was dragged into a small room adjacent to the commandant's office. He later remembered that he had just begun his salute when the phaser hit him. Now he was set upright in a square chaise, his arms and legs and head quickly bound, and various monitoring devices were connected to his body. Psychogalvanometers were set up, the thin, snaking leads attached to the tops of his hands by exquisitely small, sharp needles. An electroencephalographic skullcap was lowered down over his head, and an eye photography scanner fitted over his face. Videotape cameras telescoped out from the walls, like Cyclopean howitzer barrels capped with a single glowing eye-lens.

He tensed for a sigmoidal probe and was grateful that it did not come. Through the slightly anesthetic haze the phaser-stun had produced, Derek saw something comparable to the

move the D.I. had made with the phaser: a medic moving toward him, an injection pistol in his hand. He tried to move, to surge, to burst his bonds, but was totally flaccid and powerless. The medic blatted in Pentothal and Demerol synthetes in both Derek's arms and groins, and Derek felt a pleasurable ballooning, as if his essence were filling the entire room. He felt primally secure, and yet light and airy, swimming effortlessly in warm gelatin, his skeleton glowing, his organs itching deliciously, but not needing to be scratched, his muscles perfectly striated slabs of tensile colloid, the color-coded wires of his neutral filigrees alive and singing with rapidly somersaulting ions, like tiny prickly spheres of radiating thorns, parading through the myelin-sheathed tubes. His skull, his cranial world, felt huge, a wonderously burgeoning resonant grotto of osteal integrity; his visual agates soft rubbery insets; and his vestibular channels the purest springs of nectar in their cilia nests, twin fleshy mediators of his total somesthetic comfort.

"I am vestibular man," he found himself saying, and it was a proudly echoing pronouncement, as if quadraphonic speakers were sounding in a great stone hall.

"What was that he said?" the commandant asked the medic.

"Didn't catch it," the medic said. "Something like 'vestibule.' "

"Is he ready for interrogation?"

"Yessir."

"Gladiatorial creep," Derek said. "Immature militant soldier boy. Spuriously programmed ramrod, obscene nest of transistors—"

"Silence, Plebe," the commandant hissed. "State your name, rank, and serial number."

"Go suck a swagger stick," Derek said, his voice permeated by confidence. He felt like a man kneeling by a pool of liquid gold, and the gold was cool and thick, like mercury, and it was beautiful to see and touch and drink. He saw the pool as his id-level psychic energy, his generic fuel cell, his power source, his organismic distillate, his holistic tincture.

"What the hell did you shoot this boy with?" the commandant asked the medic.

"Routine blats of Pentothal and Demerol. It should clear away his inhibitions."

"Name, rank, and serial number," the commandant tried again.

"Bionic D.I.'s eat silicon shit," Derek said. "All gladiators hop their pneumoplastic grannies. They have grease-pit asses—"

"Whatever you shot him with has broken something loose," the commandant said to the medic. "Shoot him with something else."

"Give it a little more time."

"You gave him too much. He's talking crazy."

Derek looked out at the short man with the eagles on his shoulders and

the water buffalo horned mustache, and saw him as a windup toy soldier. The 2,000 cc's of chemical filled his bloodstream with gently pressuring tranquility, and he felt omnipotent and at the center of the world. He stood in the grotto of his skull and watched the capillary pumpings, the crackling of synaptic junctures, the tumescent arc of the vestibular cilia, and the placid horizontally of the inner-ear fluid. He smelled wet leather, lemon rinds, mushroom cellars, and ambergris. He felt infused with slowly metabolizing anthracite briquettes, nodules of mercury, cubes of congealed honey, crystalline amber ellipses, and the soft inner seedpods of apricots and mangoes. A fat orange candle simmered in his thorax, and the flame was painless and nourishing and energizing. The oxygen level in his inhibitory cortices was low, and his lifespan felt gaseous. I am a thick mist, he thought to himself, and yet I am a sodden giant, a black hole in space, a thick-skinned balloon full of liquefied Stilton, a fleshy embryo with eight extremities, a plump fetus, a star with wet tendons.

"How come you got silver birdies on your shoulders, boy?" Derek asked the commandant. The man's body stiffened, but his face sagged imperceptibly, and the medic barely held back a smile.

"I am your commanding officer," the man replied, affecting a marginally effective authoritarian retort. Derek's

face remained flaccidly confident.

"You're a tin-box soldier boy, you mean. You pin metal sparrows on your shoulders, besides. And you wear water buffalo horned hairs under your bulb-nose. You lack authoritarian presence also."

"Name, rank, and serial number," the colonel persisted.

"You know me. You know me. You sure as hell know me."

"Did you attack Sergeant Alpha 430 last night?"

"Didn't know that clanking can of tin and plastic had a name. He's got some sort of serial number, some metal tag stapled to his ass."

"Did you attack him?"

"Don't use personal pronouns for that *device*."

"Did you sever his umbilical conduit?"

"He damn well needed to be unplugged."

"Then you did attack him?"

"I disconnected a faulty machine. When you get a burnout, you pull the plug, you shut down. You shoot horses, don't you?"

"Why did you sever the conduit?"

"That hive of cheap circuitry pulled a phaser on me."

"That is within the scope of his duties."

"Robots don't point phasers at humans. Robots have their robotic roles. This bag of bolts blew his pop-off valve. He was going bonkers. He flipped out. He blew a fuse."

"You admit the cutting of the conduit?"

"Well, hell, yes. I performed a good deed. I shut off a crazy machine."

"Do you understand the consequences of your action?"

"Yeah, and I want a robotic cluster on my basic hero medal."

"Jesus H. Christ on a styrofoam crutch," the commandant said, "am I hearing this plebe right?"

"The tapes are getting it," the medic replied. "It beats anything I ever heard."

"Do you admit to trespass, assault, and maladaptive actions?" the commandant continued to Derek.

"I admit to unplugging a malfunctioning machine. And I admit to the stupidity of gladiatorial pursuits. And I admit to the emotional immaturity of military types. Furthermore, I admit that fire is the most potent extension of man, that career gladiators have frustrated dependency needs, disproportionately large hypothalamuses, dull normal cranial amperage, and poor body image."

"Heavy. Weird," the medic said.

"How did this boy ever get accepted into war school?" The commandant turned to the medic again.

"How's his personality profile?"

"Centile fifty, across the boards," the medic said, producing Derek's readouts quickly. "A garden variety normal."

"Wonder how he'd respond detoxed."

"We'll have to wait and see."

"Stash him in the brig — no, stash him in the infirmary. Flush all the tranquilizers out of him. Get him detoxed. We'll have another go at him later."

Derek was hospitalized for several days and recovered rapidly from the massive sedation effects. He was brought again to the commandant's office on yet another bright steaming afternoon, and the silent air-conditioned room was a welcome change from the outside heat. This time the commandant was flanked by two majors, one a judge advocate, and the other a psychonomist.

"You are charged with malicious assault, destruction of government property and military maladaptive behaviors. How do you plead?" It was the surprisingly robotic-sounding voice of the judge advocate.

"I do not *plead* in any context," Derek answered, his voice boldly inflected, for now he was convinced that the judge advocate himself was a bione.

"Did you sever the conduit attached to Sergeant Alpha 430 on the night of 22 July last?"

"I did."

"And why did you do this?"

"That plastic bag of ropes and pulleys pointed a phaser at me."

"Are you anti-bionic? Do you hate biones?"

"No more than I'd hate an antique parking meter, or a robot copter pilot,

or a stripped Phillips-head screw. I'd have to be mechanophobic to hate a *machine*."

"You then plead self-defense?"

"I *plead* nothing. A machine malfunctioned, and I cut off the machine."

"It is within the scope of a drill instructor's power to use his phaser on his troops," the judge advocate said in his dull robotic voice.

"A robot may not harm a humanoid, sir. I'm sure you are aware of this six-hundred-year-old statute."

"Sergeant Alpha 430 is not a robot."

"He is a 97-percenter," Derek shot back, "and he broke one of the prime laws of robotics."

"I repeat, he is not a robot."

"No hive of Akai-Sony transistor paks points a phaser at me."

"You've got a good record here," the commandant said. "What could have motivated you to take these actions?"

"Self-preservation, sir, defense against unreasonable force, an instinct for survival."

"You had no malicious motives, then?"

"None, sir."

"How do you know Sergeant Alpha 430 to be 97-percent bionic?"

"He told me so, himself."

"How do we know he truly pulled a phaser on you?"

"It was in his hand when I chopped the cable."

The judge advocate closed a dossier — rather noisily, Derek thought. "That's it, gentlemen," he said, "this man is telling the truth. The phaser was indeed found in the retracted hand of the sergeant. Since 66-percent bionics come under the purview of the robotic code, I must conclude that this man acted appropriately. The rebuilding of Sergeant Alpha will doubtless reveal the cause of the malfunction."

"The sergeant is covered by the robotic code, then?" Derek questioned the judge advocate.

"He is." Derek heard a relay click in the man's body as he spoke.

"May I ask, sir, your own bionic percentage?"

"Seventy-two percent," the judge advocate answered Derek, and there was another click, this time clearly from the thorax area.

"And yours?" he asked the silent psychomonist.

"Eighty-nine," the very deep voice replied, and it was obvious that the man had had a laryngeal implant. God, I'm talking to another bunch of machines, Derek thought. He looked at the faces of the two majors and felt disdain for them. Then a sliver of mechanomorphic empathy stirred in him.

"Dismissed," the 12-percent bionic commandant barked.

Derek Carlson, Plebe I, Eastern Continental Gladiatorial Service, was

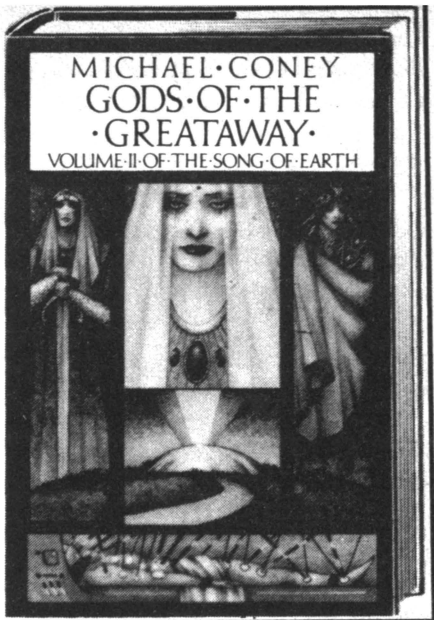
"It is mind-boggling!"

"I'm excited about GODS OF THE GREATAWAY," continues Don C. Thompson in *The Denver Post*. And no wonder. The triad from *The Celestial Steam Locomotive* is back in Volume II of "The Song of the Earth Trilogy," determined to battle the dreaded Bale Wolves for the release of Starquin and control of the Galaxy and Dream Earth.

"Vivid.... a rich, imaginative concept."—*Library Journal*

\$15.95

At bookstores, or write SCI-FI,
Houghton Mifflin, 2 Park Street,
Boston, Mass. 02108



discharged on Christmas Eve of the year 2800. The discharge cube read that he was constitutionally unsuited for gladiator training. It was later revealed that the bionic drill instructor, Sergeant Alpha 430, had been abused as a fledgling bione, and that his programming had not extirpated his residual hostility against humans. It was further determined that Sergeant Alpha had been, in effect, abusing himself with nonstandard, hedonistically reinforcing recharging regimens. He had become hooked on his own nuclear-pak rechargers, and, over, the years, this had come to dilute the inhibitory mechanisms of his cortical matrices. He was indeed a machine gone bad, his cognition scornful of his ersatz personality and identity;

and deep in his bionic matrices, a kind of primitive-instinctual death wish had developed — a computerized Thanatos drive. Sergeant Alpha's computer-repressed destiny had been to die as a biohuman kamikaze bomb. He fantasized being in single combat with large numbers of enemy, and to die as a hero atomized by a thoracic nuclear device. Now his George Patton personatype was being carefully replaced by an Eisenhower, and the plans were to make him a captain at the war college.

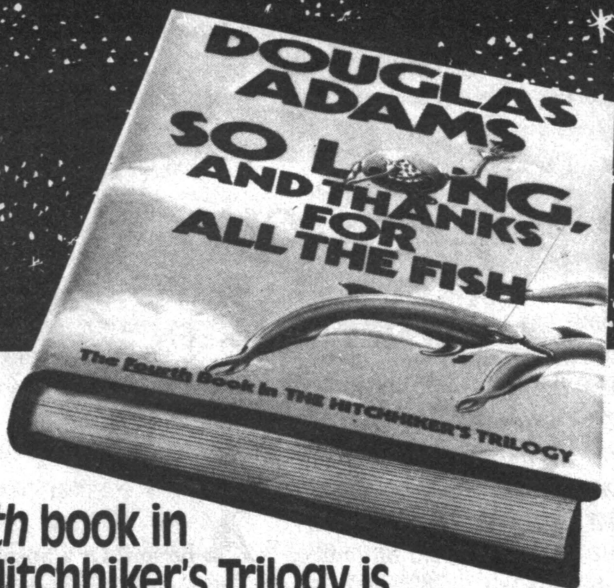
After this incident the gladiator service promptly switched its major bione contracts from IBM Akai to AT&T Mitsubishi. The Bionics Guild filed a class action suit against the gladiator service, and in a central

Georgia pasture, the ancient KKK burned an archetypal robot effigy. In the Vatican exile island of Scorpio, the 27-percent bionic pope was summoned by the College of Cardinals for a review of his infallibility parameters, and there was a brief backlash of commuters teasing robot policemen on the major traffic quay of Chicago City.

Aboard the Amtrak terrafoil van back to Old Orleans, Derek looked up into the multifaceted visual agates of the 92-percent bionic conductor and demanded the full itinerary of the route-manifest. Later he ventured a gluteal pat on the 78-percent bionic stewardess, who flashed a coy smile at him, warned him of her stunbolt implant, and then introduced him to an 87-percent copulatress. While the terrafoil shot over the mountains and valleys of the Tennessee Territory, the copulatress fitted Derek with a pubococcygeal probe, and performed a panaperture sexual regimen on him that yielded his orgasm at centile 99. The barter-unit price was high, and the girl kept breathing, "To the victor belongs the spoils." For a few pinacular seconds, Derek felt oceanically penile, and decidedly nonvestibular.

Home again, the horizons of the Old Orleans marshlands once more rode high in his visual field, and he felt the familiar infusion of subtropical heat and muggy humidity and low barometric pressure. Once again he wriggled his bare toes deep into the mats of dewy Saint Augustine grass on the lawns around his home. He saw the snakes, fat as fire hoses, sleeping on the bayou flats, caught a hundred-pound gar, ate a bucket of crawfish, and took his pirogue deep into the swamps at dawn, where a huge owl flew low past him in the most profoundly feathered silence. Somewhere, a thousand miles up on the face of the globe, and three thousand feet higher above the sea, lay the memories of his brief and exciting gladiatorial exploits. I am organic with this place, he thought as he looked down into the black waters of the bayou, and it is here I will stay. I am atomic, yes. I am molecular, organic, tendinous, muscular, bipedal, kinesthetic, somesthetic, vestibular, and *human*. And there is a wholeness, a natural integrity in being human that I must cleave to. There are the men and there are the machines, and I am a man.





The
fourth book in
the Hitchhiker's Trilogy is
"the best entry since the original
Hitchhiker's Guide to the Galaxy."

—Kirkus Reviews

Arthur Dent and the gang are back—in the *fourth* book in the Hitchhiker's Trilogy, a riotous and riveting series with more than four-million copies in print. It's everything you wanted to know about the first three books, but never thought to ask.

Join Arthur in his quest to find out:

- What *really* happened the day the Earth was demolished?
- Why have all the dolphins vanished?
- What is God's Final Message to His Creation?

The *Washington Post* called Douglas Adams's first book "extremely funny . . . inspired lunacy that leaves hardly a science-fiction cliché alive." His second book was "highly recommended" by the *Library Journal* which praised it as "one of the best pieces of science-fiction humor available." And *Time* raved that his third book was "like nothing ever published before."

Don't miss
**SO LONG,
AND THANKS FOR ALL THE FISH**
by Douglas Adams

\$12.95, now at your bookstore.

HARMONY BOOKS



Terence Green, "Barking Dogs," May 1984, again demonstrates a sure hand with a truly inventive idea in this short tale about criminal justice of the future.

Legacy

BY

TERENCE M. GREEN

*A Daniel come to judgment! yea,
a Daniel!*

— The Merchant of Venice,
IV, i, 223

I

It is time that I visited my father.

I do not think that he ever truly awaits my visits. But it is a son's duty, is it not? This should be a time of purging, a time of reconciliation. I feel a small measure of guilt that this has not yet occurred after the three mandatory weekly visits, and an even greater measure of remorse. Somehow, I did not think that it would be like this. What I expected, I cannot say. But certainly not this. Certainly not his acceptance. This, I must admit, has baffled me.

. . . .

II

A prison? Or a hospital?

I think of it as the former. My father thinks of it as the latter. We are both wrong. Or, we are both right. Does it matter?

Mere semantics. The reality is the place. It exists. For my generation, it has always existed. I try to imagine what it was like before, but my mind can scarcely make the leap.

I enter by the side door. When I mentioned this to my psychocomputer, it replied coolly that I was doing this because I had not yet directly faced the issue with my father. Really, this is mere casuistry. I do this because I do it. It is a matter of convenience, of access. The computer fails to grasp the simplicity of this. Or of anything.

. . . .

III

He is on the third floor, sitting in the same chair behind the glass partition. I hesitate, even though I know he cannot see me.

But I know my duty. I am his son.

The attendant — a man in a white suit and white shoes — sees me, acknowledges me, and places the earphones on my father's head, moving the electrodes into place. I nod in confirmation and seat myself at the panel on my side of the glass partition, picking up my own headset, adjusting it for comfort. Leaning forward, I switch on the microphone, preparing to speak.

This is, by law, my final visit, for this is the fourth week since my father was murdered.

And I am his son.

IV

How does it feel?" I ask him this constantly. It is the only question that makes sense to me. This is the time for serious discourse, for questions of import. All else would be frivolity, given the circumstances. Anyone could see that.

His face is placid; his eyes remain closed. The tubes that nourish him and the circuits that monitor him dangle from his head and arms grotesquely. I know it is a miracle. But it is also a nightmare.

"It feels strange." I hear his words

through my headset and nod. I have heard this from him before. *Strange*. It is the word he constantly selects. Thinking about it, one can see that is the word that fits most perfectly. All this is, as he notes, *strange*, exquisitely so.

Our communication filters through the recording device interpolated by the authorities, according to the law. I must, eventually, ask him. But not yet. Not yet. Some time is mine. I must know him more, in however brief a time is left. This urge has grown, solidified, week to week, once it became clear what he was doing, once I understood.

I used to hate him. Now I do not know.

It is strange.

V

It was Mrs. Gorman, his neighbor, who found his body. When he failed to respond to her knocking, she peered in the small window on the top third of the door and saw him lying prone in the hall. Always a good neighbor, she was quick to respond, to do the right thing, and the authorities were duly summoned. And because it was a case of murder most foul, unwitnessed, he was Revived, according to law, so he might name his murderer, so that justice might come to pass, before his final summons from Azrael's horn.

Even now he is fading, his thoughts

disjointed, his extended time glowing but feebly. Four weeks is always the maximum; no one has been sustained longer. Perhaps someday. But not yet. Not now. Not for him.

His face is puffed from the injections, his skin harshly pink from the electrostimulation to the brain. He has died once, and will die finally quite soon. Maybe today. More likely tomorrow. But soon. There is no final escape — merely a respite, authorized and codified by the extended arm of the law, to expedite their work.

To see that justice is served.

VI

It is that heir's duty to deal with this. And I am his sole heir, the one to whom all that is his has been bequeathed. My legacy is at hand. Yet when I close my hand about it, it crumbles; when I squint my eyes to see it, it becomes transparent; when I try to give it voice, I become mute.

VII

We sit and face one another.
It is strange what I feel.

VIII

What are you thinking about?" I ask him.

I sense his cerebral activity stirring in response, struggling against elimination.

"I think about your mother," he replies. "I think of when she was young." There is a pause. "This sustains me." There is a longer pause. "Sometimes," he adds, "I think about my father."

The silence that ensues crackles with the static between the living and the dead.

Without thinking, I ask suddenly, "Is there a heaven? A hell?" I have never asked him this. I am not sure where the thoughts came from. Now they seem impossibly rude. The chance of traumatic disappointment hovers over the answer.

"No," he says. Then: "I don't know." I feel his tremor, then sense his acquiescence. "Does it matter?"

"I thought you might know," I say. "I thought it might be clear to you."

"Many things are clear to me," he says. "The things that matter."

IX

I must ask you, Father. The law requires it."

"I know."

Even now, though, I know what the answer will be. It will be the same. I understand this much, at any rate. He would have no reason to change it now — not after refusing to answer on the previous three encounters.

It is why I now doubt myself.

"Who killed you?" I ask.

The static reaches an unearthly crescendo, the words careening

through the vapor, through electricity, through time, through infinite space. Then it is gone, and there is the unnatural clarity.

"Everyone," he answers again. "They have all killed me."

"The law wants to know," I add, pursuing my duty, for myself, for my father, and for the record. "Who is guilty?" The static rises once more, crisp, biting, then mutes to a soft stream. "Who?" I ask again.

"Time," he says. Again.

X

The answer is the same. I have

heard it before. My father, even in death, will not cooperate.

I used to hate him. That is why I killed him. He knows this. Yet he will not point the finger. This, he knows, is not a matter for the law. This is between my father and me. They are mere interlopers.

Somehow, I did not think it would be like this. It is indeed strange. How could I have known? How could I have done otherwise? And how else could I have learned that I love him?

My legacy. I see it now. I see it.

IMPORTANT NOTICE TO SUBSCRIBERS ON THE MOVE

If you are planning a change of address please notify us as far in advance as possible, and allow six weeks for the change to become effective.

Be sure to give us both your old and new address, including the zip codes. Print clearly and, if possible, attach an old mailing label.

OLD ADDRESS

(attach label here if available)

| | |
|-------------------------|-----|
| Name | |
| Address | |
| City | |
| State (please print) | Zip |

NEW ADDRESS

| | |
|---------|-----|
| Name | |
| Address | |
| City | |
| State | Zip |

SUBSCRIPTION SERVICE,
Mercury Press, Inc., PO Box 56, Cornwall, CT 06753

This superior tale is Daphne de Jong's first for F&SF. The author is a third generation New Zealander who teaches there and may have been the first writer there to use a word processor. She has won a number of prizes for her short stories, including the coveted Catherine Mansfield prize. She writes romance novels under a pen name and is now working on a historical novel about New Zealand.

Roimata

BY

DAPHNE DE JONG

She thought at first that it was a peculiar kind of shell, when she felt the edge of it under her bare foot and bent to pick it up. There were shells of all kinds on the beach, and she had four or five stuffed into the pockets of her jeans already. But this smooth piece of carved green stone that fitted easily into the palm of her hand was something else. She could see it had been broken; the edge of the break was barely worn, but although she searched, she couldn't find the rest of it.

As she touched the glossy surface, running her fingertips over the carving, the sun slid behind a cloud and a small, vicious wind whipped sand stingingly around her calves below the rolled-up jeans, and she shivered. Time she went back to the beach house that her New Zealand hosts called "the bach." It was just one of

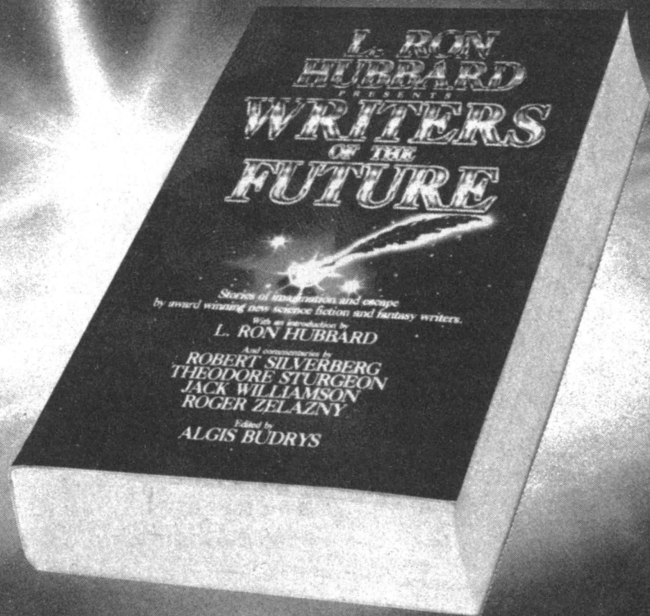
the new words that she had learned in her year as an exchange student. This would be their last weekend at the beach before she flew back home to a North American winter.

"What do you think it is?" she asked Mr. and Mrs. Grace, showing them her find.

"Looks like part of a tiki," Mr. Grace said slowly. "Could be greenstone, too. Pity it's broken, Vicky. It might have been valuable."

Later their son Gary took it to an expert at the university in Auckland, and he said yes, it was nephrite — New Zealand jade — and it did seem to be part of a tiki. Probably it had been lost many years ago, maybe even a hundred or more. The beating wind that continually reshaped the sandhills sometimes uncovered ancient skeletons; pre-European tools and weapons of long-dead warriors; and

DISCOVER: GOOD SOLID SF! NEW IMAGINATIVE FANTASY! 15 NEW WORLDS



The first collection of award-winning stories of the new "Writers Of The Future" contest.

"There has never been a reading event like *Writers of the Future*...never a more eye-catching collection of brand-new talent picked by top names in the field, filled with SF entertainment across the full scale."

— Algis Budrys

"I was delighted by the high level of accomplishment. It fills me with hope for the future of science fiction!"

— Robert Silverberg

"...I wish this book had been around when I started to write..."

— Theodore Sturgeon

Contest winners selected by:

Gregory Benford
Algis Budrys
Stephen Goldin
C.L. Moore
Robert Silverberg
Theodore Sturgeon
Jack Williamson
Roger Zelazny

This unique collection is edited by Algis Budrys.

Get your copy today! Paperback — \$3.95

Available now at your favorite bookstore for \$3.95 in paperback. BRIDGE PUBLICATIONS.

relics of the nineteenth-century whalers from England, Australia, America, France, and even Russia, who plied their bloody trade about these coasts. Every so often the restless sands revealed the rusty rim of a buried tripod in which they had boiled up the whale flesh to extract oil, or the disintegrating blade of a flensing spade, which had once flashed sharp and keen in the winter sun to peel the blubber away from the dead carcass.

Vicky was thrilled with her find, even though Gary teased her about its bringing her "only half-good luck."

"I'm not superstitious, anyway," she said. "I don't believe those cheap plastic imitations I saw at the airport could bring me more luck than even half of a genuine old greenstone tiki. Mine might once have belonged to some warrior chief." Her eyes grew dreamy.

"Or some beautiful Maori maiden," Gary sighed, hands pressed to his heart. "Big, dark eyes, golden-brown skin, swaying hips in a flax skirt"

"That's a male chauvinist fantasy," she scoffed, and he grinned and said, "What about yours? Of course, your warrior chief was as likely to eat you as anything else"

He did help her look for the other half of the tiki before they left. But they never found it.

There was an old story in the village about a great white bird that

had come one night and settled on the waters of the bay. And in the morning an egg had floated from the great bird and become a canoe, clumsy and fat, not at all like the narrow, long war canoes with high carved prows that the Maori made from armspan-thick trees, burning out the centers and adzing the sides into shape with sharpened stone tools. And the passengers in the odd canoe were spirits, not men. For they were not brown-skinned, but white like ghosts. And the people were very afraid.

The spirits, with gestures and meaningless sounds, demanded water and food. They gave the people soft cloaks in return, and an ax that was hard and shiny and awesomely efficient. And they had the power to call down thunder and lightning to kill at a distance when they were angry, simply by pointing sticks at the person they wished to punish.

In time, the Maori discovered that the visitors were not spirits, after all. A young rangatira investigating their canoe was roughly pushed aside, and instinctively avenged the insult to his warrior status by raising his sharp-edged patu and striking the aggressor.

Spirits do not bleed and die. The mysterious power of the black sticks struck down many warriors in the ensuing conflict, but the initial awe of the people was overcome. The spirits were men, after all; the great bird

was only an enormous canoe with sails of some limp white material instead of woven flax; and even the guns lost their terrifying supernatural aura when on subsequent visits other strangers were coerced into selling some and demonstrating how they worked. The much-prized musket became a regular item of trade. And the tribe prospered in its continual warfare with its neighbors.

The strangers were not spirits, but the first time Roimata saw the pakeba she learned to call Matene, she could have believed him a god.

The dawn light was rippling faintly on the gray-blue of the sea, the horizon marked by a dark line against a flame-streaked sky. She had filled her flax kiti with shellfish gathered from the rocks that would soon be covered by the tide, stopping occasionally to glance with a stirring of excitement and curiosity at the starkly etched outlines of the giant canoe out in the bay, its three tall masts like standing spears in the dawn, for the sails were furled to the crossrees, making them almost invisible in the early light.

When the boat left the ship and began to make a path through the water, she threw the last of the shellfish she had gathered into the kiti, and grasping its handles firmly in one hand, scrambled across the hard wetness of the rocks, her brown feet sure and practiced as they carried her to a hiding place above the beach,

where she could lie on her stomach on the sandy ground and watch the strangers through a gap in the clumps of flax that edged the cliff.

There were six men in the boat, and as it neared the shore, they jumped out and pulled it high up on the sand. Roimata giggled softly at the sight of their clothing, their arms and legs confined in narrow tubes that she imagined to be most uncomfortable. They had close-fitting things on their heads, too, except for one of them, and at first she thought he was wearing some odd, light-colored head covering — until she realized it was his hair, and in puzzled wonder she wriggled herself closer to the soft edge of the cliff to make sure she was not mistaken.

Her own long black hair brushed her cheek and trailed on the sandy ground as she edged forward on her elbows.

The cliff crumbled so suddenly that she was falling, then hitting something with her body, then falling again, before she realized what had happened. There was no time to even think about saving herself before her back landed jarringly on the sand, and the world continued to spin for a sickening few seconds, and then stopped.

There were voices shouting, and running feet on the sand, and very quickly she was surrounded by faces — weird, sharp-featured, pale faces, some of them covered with hair of

unnatural colors.

She tried to get up, to run away from the faces, but when she moved, a terrible pain attacked her left leg, and even though she ached all over, the pain in the leg was much worse than anything else. The faces blurred and seemed to fade, and then as they receded, one voice rose over the others and one face came back into focus close to hers. She saw eyes the color of a summer sky, and blinked her own brown eyes incredulously. He had no beard, but as he smiled, the sun struck through a gap in the morning cloud and gave his hair a dazzling glow. Roimata gave an exclamation of spellbound amazement.

She didn't understand what he said, but his voice sounded soothing, and when he took her wrist in his fingers, she let him do it. He smiled at her and gently pushed the hair that had fallen across her face and probed under it with his fingers, and then carefully over the rest of her, still quietly talking in his unfamiliar language. One of the other men spoke and laughed, and the man who was touching her turned his head and replied in a hard, angry voice. But then he smiled at her again and resumed his soft, unintelligible monologue. When he reached her leg, he stopped smiling, and after a moment he said in her own tongue, though with a harsh, stumbling accent, "It pains?"

Surprised, she nodded a reply.

He touched the leg again, and she looked down and saw that it looked wrong, somehow, a little bent at the calf. There was a woman in the village with a leg that had been crooked since she was a little girl. She walked like a crab. Stark fear grabbed at Roimata, and she shuddered.

The man put his hand on her arm and spoke again in his own tongue, in the same reassuring manner he had used before. He turned to his companions and talked to them in short, crisp-sounding bursts, and they began to move away. She saw one go to the boat and take out an ax, the wicked blade-edge sullenly agleam in the pale sunlight.

Apprehensively, she glanced at the man beside her, and he laughed and shook his head, and touched her arm again. She didn't know what he said to her, but she smiled at him to show she understood that the ax was not to harm her.

The men came back with two straight branches from a tree, stripped of bark, and one of the limp sails that they used on their peculiar craft.

He seemed pleased with the sticks, but he shook his head over the grayish-colored sail and threw it down in a disgusted way. Then he impatiently removed the white garment he wore on the upper part of his body, and tore it into long strips, using his teeth and hands and a knife one of the other men handed to him.

When he made two of the men

bold her, she was frightened and tried to struggle, but he talked to her and dredged up some more Maori words from his small stock of them — "broken" as he touched her leg, and "mend" as he pointed to himself and then to her leg again. She had seen warriors brought home from battle with broken limbs splinted, and guessed what he wanted to do. His voice soothed her into trusting him, and when he put his hands firmly on her leg, she didn't protest.

As she felt the wrenching agony that followed, she wanted to scream and fight like a madwoman against the hands that held her, but the voice was still talking, and she believed he was not trying to kill her.

She closed her eyes tightly and clenched her teeth to stop the scream. Soon she would be old enough to be tattooed with the swirling blue designs of the moko on her chin and lips to show she was a grown woman, old enough for marriage. She would have to lie unflinching under the tattooist's bone needle. Surely she could stand this pain as bravely.

Something hard and cold pressed along the length of her calf, and sharp pains shot through her leg as he lifted it to bind something round it.

She heard him say, "Good girl," and although she didn't know then what the English words meant, she recognized the sound of them the next time he used them at her. She

opened her eyes, but the sky had turned black and the tide must have come in, because her skin was damp and cold and the roaring sea was washing over her.

Vicky woke feeling cold and clammy, and the cool, hard sand under her back became wrinkled sheets on a foam mattress. A vague ache in her left leg disappeared when she gingerly moved it as though she expected a violent shooting pain, and she grinned feebly at herself, sitting up in the bed, fingering the cotton of her pajamas in a relieved way, chasing away the dream-memory of the subdued clack-ing of dried flax against her thighs.

All the same, the guy hadn't been half-bad, she thought with faint regret

She could hear Mrs. Grace in the kitchen, and Gary was whistling by on his way to the bathroom. Time to get up, and make the most of her last few days in New Zealand.

That silly conversation with Gary must have been responsible for the dream

She got up and went over to the dressing table to comb out her hair. It was brown and barely shoulder-length, and her eyes were an indeterminate green. She remembered the feel of straight black hair brushing her naked back, and the small weight of the palm-sized tiki resting on her skin, tied by a flax strand about her neck

The tiki lay on the dressing table with a few shells and a stone from the coromandel that had a streak of gold dust running through it. She picked up the fragment of greenstone, a little shaken by the knowledge that she knew exactly how the original had looked: the three-fingered hands clasped over its belly above the bowed legs, the grotesque head set at right angles, the small notched marks the carver had made in the pointed, protruding tongue.

She ran her thumb over the curved legs and the rounded belly that was all that was left of the tiki, and an inexplicable sadness swept over her, so intense that tears filled her eyes, shocking her as she saw them in the mirror.

She put the fragment of jade down quickly. She was feeling emotional because she was leaving soon, and tikis were all alike, anyway. It wasn't at all surprising that she should have in her mind a vivid picture of how hers had looked when it was whole.

Gary rapped on her door. "Hey, lazy, aren't you up yet? Shall I come and dig you out?"

"I've been waiting for you to get out of the bathroom!" she called. "And I *am* up. *You've* only just got out of bed yourself!"

"I'll bet you're not!" he said, rattling the handle of the door threateningly.

She heard his mother's voice remonstrating with him, and he

laughed and went away.

She wondered what Gary would say if she told him she had dreamed she was the Maori maiden of his fantasy. Funny, there had been no sign in the dream of the chief of *her* imagination. Maybe the tiki had belonged to a girl, at that . . .

Gary was good fun. And even though there were plenty of pretty girls about, Maori and "pakeha," he seemed to think that Vicky was nice to be with, too. They liked each other, and planned to write after Vicky went home.

The night before she left, she dreamed again about Roimata, but when she woke, all she could remember was a confused medley of being carried on a stretcher improvised from the dirty sail and a pair of oars, of being met by suspicious young men with their carved *talaba* spears in hand, and trying to tell them how the stranger had mended her leg; then there was a vague impression of a person who was her mother, a woman with thick black hair and blue whorls tattooed on her chin, who keened and swayed and chanted over her . . .

And a name that was in her mind when she woke — *Kabu*. A name that filled her with a vague worry and unhappiness.

It was good to be home again, although she was sorry to leave New

Zealand. The weather was cold and blustery, but the house seemed warmer and cozier than she remembered, and the accents of her family and friends sounded soft and welcoming after the clipped twang of the New Zealanders.

Her married sister came over with her husband and little boy, and even her younger brother, Tony, sat relatively quiet as she chattered excitedly and dug out photographs and souvenirs to show them.

"And this is my half-good luck charm," she said, picking out the tiki from a box full of shells, stones, postcards, and assorted mementos. "I found it myself, and it could be a hundred, or even two hundred years old, according to the experts."

Tony was more impressed by the plastic tiki she had bought for him, which if cheap was at least whole. But the antiquity of the greenstone made a mild impression on her parents and her sister.

She went to bed tired and contented, leaving the box of souvenirs on the bedside table.

Kabu was glowering at her across the space between her family's whare and his. She stood in the shadow of the tightly woven raupo thatch that extended over the doorway of the house, balanced on the crutches that the man Matene had got one of his companions to make for her. His mending had been good, and she un-

derstood from his halting Maori that before long the splints would be removed from her leg, and she should be able to walk alone.

The other man had called him "the doctor," and when she tried her tongue around the odd-sounding syllables, pointing to him and saying, "Te Tokatore?" he laughed and repeated the doctor part and something else that sounded so complicated she wouldn't attempt to try and repeat it.

Disappointed, and a little hurt at his laughter, she turned away from him, drawing her flax mat about her. But he spoke to her gently and took her hand in his, and said, touching his chest, "Martin — Mar-tin."

She looked sullenly at the packed dirt of the floor, and he said coaxingly, "Ro-ee-mabta?" His careful sounding of her name made her want to smile, and she turned her head aside again to hide it. But he put his hand under her chin and made her look at him.

He smiled and pointed at himself again, and said, "Martin." And when she tried it, and it came out in soft Maori syllables, "Matene," he said gravely, "Good girl." And she smiled at him because she knew by now that the guttural-sounding words meant that he was pleased with her.

But Kabu didn't like her smiling at Matene. Kabu had been one of the young men who had met them on the morning that her leg was broken.

He had pushed Matene aside and made to touch her, and when Matene pulled him away, he raised his taiaba threateningly, so that she screamed, "Kabu — no! Don't hurt him. He helped me!"

With the spear poised in his hand, he had listened to her and, reluctantly, at last lowered it and escorted the party to the village.

He had stood by suspiciously all the while the white men were in the village, Matene helping her family to make Roimata comfortable, and conveying by signs and his little store of Maori words that she must keep still and not disturb his bandaging until he came again. The one who spoke their language a little better told the chief that the white men planned to make a village of their own down by the beach, persuading him that his people could be richer by many blankets, axes, steel knives, and muskets in return for supplies of vegetables and pork.

Matene came often to look at her leg and make sure his instructions were understood and followed. At first Kabu had come often, too, to bring a fat pigeon he had snared for her, or a slim silver kahawai caught in the nets that he had set the night before off the beach.

When they were both very young, Kabu had been her playmate in the village, favored above the others because he was lively and quick at everything, and liked to laugh. He had

been quick to anger, too, and occasionally bit out at Roimata when she annoyed him in their childish games. Sometimes she bit him back, and sometimes she won, but as they grew older, he grew bigger than she and also more full of the pride in being a male that came naturally to a race of warriors. He went off with other boys to play at war games with mock spears made of raupo reeds, and to swing across the river on a flax rope suspended from a pole standing on the bank, and to learn how to hunt for birds and rats and to paddle a war canoe.

Roimata had learned to cut flax and scrape the green from the fibers with a mussel shell as she sat holding the stiff leaves on her thigh; to plait kitis — for gathering food, and for cooking it in the ovens dug in the ground; and to weave intricate patterns in reeds and flax for the walls of the big meetinghouse on the marae where the chief and his council of rangatiras discussed important tribal business.

Kabu grew tall and strong and went out with the war parties and had his moko tattooed on his cheeks and thighs. The other girls began to look at him secretly and giggle to each other behind their hands as he passed by with a tall feather in his thick, curling hair; a long curved taiaba over his shoulder; and a sharp-edged patu war club in the band of the short, swinging flax garment

about his waist. Roimata kept her eyes on whatever task her nimble hands were engaged in, and did not look up.

But she knew that Kabu looked at her, and not as he had when they were children. One night Kabu would come to her family's whare and take her, willingly or unwillingly, to his own home. And in the morning her father would come with her relatives and demand her return. There would be many angry words, and perhaps her relatives would seize her and try to drag her back home with them, but Kabu would call his family to help him, and after many threats and much waving of fists and talabas and patus, he would pay her father compensation — utu — for the loss of his daughter. And so they would be married.

Once she had been sure that he would come for her, and she had amused herself with dreaming and wondering if she would struggle and make a great noise, screaming and crying to her family to help her, so that Kabu would have to be very brave and strong and defiant in the face of their opposition and hers, and very determined to convince her that he loved her enough to face any danger to have her for his wife.

Or perhaps, if he courted her first with sweet words and gifts and soft melodies on his flute, she would steal from her father's house at the touch of his hand and tiptoe through the

darkness within the shelter of his feather cloak and his strong arms to his whare and keep them about her until morning.

But perhaps he would not come, after all. He had stopped bringing presents since they had quarreled fiercely on the very first day that Matene had let her walk about with the crutches.

Matene had held her at first, until she got used to using the rough crutches to help her walk. Kabu watched from a distance, and when Matene, after much laughter and teasing in two languages, moved away, Kabu strode up to her, and, casting a glance of dislike at the white man, said, "I will walk with you."

Matene paced at the other side of her, a few feet away, and after a while, Kabu said, "Tell him to go away."

But she wouldn't, and then he tried to hurry her, and she stumbled so that he had to steady her. Matene came closer and said something sharply to Kabu, and the young man stalked off in a huff.

When Matene was gone, she had sat outside her father's whare with the crutches lying beside her, feeling tired but happy. Kabu came and stood in front of her, kicking at the crutches.

"They are badly made," he said, sneeringly. "These pakeha with their sharp steel knives and their axes that

fell trees in so many blinks of an eyelid — this is the best carving they can do?"

Roimata said nothing, looking at his broad feet planted on the dusty ground before her. They paced away restlessly, then came back. "I could have made you a much better pair of extra legs than that!" he said, and violently kicked them again. One of them jumped a little with the force of his blow, and fell on her hand, bruising it.

Angry, Roimata looked up at the darkly resentful face above and taunted, "You would not have thought of it! You are not as clever as the pakeba, for all your boasting."

"Clever? This is clever?" He picked up one of the crutches to inspect its crude workmanship, and threw it down again with exaggerated scorn.

"Matene mended my broken leg," she told him.

"How do you know it is mended? Can you walk without these clumsy things?"

"I will! Matene says I will!"

"Matene, Matene! You think of nothing these days but this pakeba! I wish he had never come here!"

"Oh, I see! You would rather have me spend the rest of my life like a seagull with one leg, like poor Manu who walks sideways because her leg is bent, as mine was before Matene mended it!"

"Maybe it would not be broken if you had come home when you saw

the strangers' canoe, instead of watching them from the cliff. Were you trying to get a better look at your precious Matene when you fell?"

She must have looked guilty, and he gave an exclamation of angry disgust and stalked away.

Now he sat before his whare, honing the already keen edge of his patu, the short carved handle held firmly in his palm as he ran the sharpening stone along the curved edge of the blade that could sever a man's throat or split open his skull in hand-to-hand fighting.

She returned his sullen gaze with careful indifference, looking away from him about the village — at a group of women weaving flax; a couple of small naked boys rolling about the dust, locked in mock combat; four girls trying to master the intricate movements of a stick game, the rhythmic thump-on-the-ground, clack-together, then pass-from-hand-to-hand.

The women looked up first, busy fingers stilling in their task; then the girls turned, sticks held in their hands; and the little boys stopped their game and looked expectantly to the path from the beach. Matene and his friend appeared, pushing aside the fern fronds that hung across the path, and Roimata, casting a quick glance in Kabu's direction before she hurried on her crutches to

greet them, saw him stand up, his hand tight and powerful on his patu, and then turn his back to disappear into his whare.

Returning to school was fun. Vicky picked up old friendships and made some new ones. Being away seemed to have broadened her outlook. A lot of people wanted to hear about New Zealand, and she got quite used to giving talks on her experiences. She always had a date on Saturday night, but there was no one special. Gary wrote almost weekly, and she wrote back about as often. She kept a picture of him and his family on the table by her bed, along with the fragment of the tiki and the rock with the gold streaks running through it.

Sometimes she eyed the green-stone with a sort of troubled wonder, for it seemed to her that it was responsible for her occasional vivid dreams of a place and time that had nothing do with Vicky Carr and her life. But the dreams were harmless enough, and lately they had been pervaded with a singing happiness that lingered into her waking life. Often she woke in the morning with a picture of a fair-haired man in her mind that seemed more real than the photograph by her bed of Gary, or even than the memory of last night's date.

. . .

The top of the cliff was windy, and she stood against the salt-tasting buffeting with her feet planted apart and her cloak pulled about her, conscious of the strength and straightness of both her legs, and laughing triumphantly into the wind because of it.

It was the first time she had been to the beach since the day she had fallen from the cliff, and the longest walk she had taken since Matene had removed the splints and bandages and helped her to walk without crutches.

Lately he had not come so often to the village, and she wanted to see him again.

The pakeba's buts were scattered about above the high-tide mark. Some were whares built by the Maori, in return for payments in tobacco, axes, and muskets. But the but where the whalers kept their guns had been made by some of their own men, and it had some magical thing on the sturdy wooden door so that only the pakeba's chief could enter. Another locked wooden building housed their stores of food, clothing, and tools. This she had learned from her eager questioning of those who had been there to satisfy their curiosity or to offer their services in the hope of receiving more of the coveted goods of the white men.

There was a curious apparatus at the water's edge, like a huge angular

skeleton, that enabled the men to draw dead whales out of the water, so that they could strip the carcasses of their oily layer of blubber and take the tensile baleen from their mouths. The Maori feasted on the flesh when a whale was caught, but the pakeha found the by-products more desirable. When the calving season was over and the she-whales ceased to swim close to the shore to give birth to their young in shallow water, the ship would return and take away the whalers with the oil and the baleen that they had gathered.

In the water lay huge curving whalebones, some half-buried in the sand, a desultory cloud of gulls ca-reening and crying above them and picking at the ragged remnants of stinking meat still clinging to some of the great ribs.

There were no boats drawn up on the shore. The whalers, their boat crews augmented by young Maori from the village, were out at sea on their daily quest for prey.

But Matene did not row after whales. His task was to tend to the two men who had been injured in a storm at sea just before their ship anchored in the bay, and the man who had almost severed his foot from his leg with one of the sharp spades used for peeling off the blubber.

She wondered which was Matene's hut. And then she saw him come out of a doorway and begin to walk

along the sand, his fair head bent to the wind, and she called to him, flying down the loose surface of the sandbills to the beach.

"Matene! Matene!" Her feet felt like wings as she ran across the cool winter softness of the sand, and her cloak flew from her shoulders as he turned, smiling, to wait for her. She reached him with outstretched hands, panting and smiling and still saying his name.

He took her hands in his and looked at her with pleasure, especially at her leg, and she bopped on it to show him how strong it was, fingering away black hair that whipped across her eyes.

The wind was picking up her discarded cloak and lifting it and dropping it again, blowing it along the beach. Matene lightly touched her arm, noticing the tiny goose pimples on her brown skin, and went after the cloak. She followed, and the two of them chased the elusive thing all over the beach, laughing and calling to each other in two languages, almost colliding once or twice as they both swooped for it, only to have the wind scud it away from them again, or snatch it into the air above their heads.

Eventually it dived to the water and floated on the receding waves until Roimata splashed into the sea and retrieved it.

But when she would have wrapped it round her, Matene shook his head

and took it from her and hurried her across the sand to his hut, and gave her one of his soft gray blankets to use instead.

His Maori had improved, and he conveyed to her haltingly how pleased he was that she was well again; and she, with graphic gestures, kneeling at his feet and taking his hand to put it against her cheek, tried to show him her gratitude. He shook his head and laughed, and his pale complexion for a little while took on a most unusual reddish tinge.

He let her inspect his belongings, and told her their names, which she tried to memorize. The objects were strange enough, but their names, in his language, were even more so. Stool, table, lamp, cup, dish.

Several of the whalers had taken Maori women from the village to live with them. She looked curiously for any evidence that Matene shared his home with a wahine, but there were no conclusive signs. She tried to ask him outright, but her English and his Maori led them into blind byways, and she had to give up.

She picked up a small pointed stick and looked inquiringly at him. He took something flat and white from a shelf and started making small black marks on it. He said the stick was "pencil" and the white thing "book," and she remembered the sounds in her mind, although it was many weeks before she pronounced them to his satisfaction.

When he pointed to the marks he had made and said her name, she didn't understand, and when he made more marks and said his own name, she was still bewildered. But he was patient, and it gradually began to settle in her mind that there was some relationship between the sounds and the marks he was making. And because above all things she wanted to please Matene, she became his willing, if often puzzled, pupil.

The dreams were filled with gaiety and much laughter and a sense of achievement. Often, when Vicky woke, the approving words "Good girl" still echoed faintly in her ears, along with fragments of conversations carried on ever more fluently in broken English and halting Maori, of which the sense and the words were forgotten, but the essence of shared thought remained. Sometimes the encouraging hand on her shoulder was so tangible that she consciously shrugged it off on waking, because the real world was waiting, and she had a full and interesting life to lead, outside of that dream world of the past.

She didn't mention the dreams to anyone, not even in her letters to Gary. She felt that they were unusually persistent and vivid, and sometimes had the creepy feeling that in her sleep she was reliving actual events from someone else's life. She read a

book or two from the library on reincarnation and extrasensory perception. They seemed a bit spooky and not particularly helpful. The dreams were not at all spooky, although sometimes she had a vague impression when she woke of stormy seas pounding on the beach and lightning leaping from boiling clouds, of cold winds and pelting rain keeping the whalers huddled in their huts, and the Maori in their darkened whares wrapped in their flax cloaks or the woolen blankets traded from the pakehas.

To Roimata the weather didn't matter as long as the sun shone from Matene's bright hair, and the blue sky smiled at her from his eyes.

It wasn't until after the accident that the first shadows of unhappiness began to cloud the dreams.

It was a commonplace sort of accident, and rather silly. The boy who was driving the car with Vicky and another couple in it swerved to avoid a large dog that appeared from nowhere and ran in front of them. He kept saying afterward that he knew he shouldn't have, but the automatic reaction was quicker than thought. The car demolished a fence and was stopped by a very solid gatepost. No one seemed seriously hurt, but Vicky had a bump and a slight cut on her head and was for a short time knocked out. She was kept in the hospital overnight and then sent home and told to return if there were any problems.

Obviously, none were really expected.

Matene was drawing her picture. Roimata sat very still and waited patiently and proudly for him to finish his sketch. At first she had found drawings almost as incomprehensible as her introduction to writing, the black and gray marks and smudges meaning nothing. But after Matene had asked her take off the tiki that bung at her throat, and had drawn round it onto the paper, and had translated the carving into his two-dimensional medium, she looked at the sketches in his book with different eyes — and saw with great admiration how he had drawn the beach with its buddle of butts; his ship seen from the shore; one of the Maori fishing canoes skimming across the bay; and some of his compatriots at their work, shirts flying in the wind, muscles straining as they pulled at oars, threw their darts at the whales, and hauled them to shore.

Once he had tried to show her in his drawing how he had come in the great canoe with the white sails from a place far away, which he called America, and which he said was much bigger than Aotearoa. She had only a vague notion of the immensity of such distance and size, but they were a matter of wonder to her all the same.

When he had finished drawing, she looked at the face on the paper and touched her own tentatively, and giggled.

"Is it me? Do I look like that?" she asked him in Maori.

Matene laughed and turned away, looking for something in the chest he kept by his narrow bunk with its thin straw mattress.

The thing he handed her was shaped rather like a patu, but without its sharp edge, and when he gently placed it before her face, she jumped in surprise, so that he laughed more loudly. He put his arm about her and sat beside her, and his face appeared with the other in the mirror. It was like a still rock pool or the puddles that appeared around the village after rain, only much clearer. She touched her face and studied it with pleasure in the mirror, and when Matene picked up the sketch, inviting her to compare it with her reflection, she looked from one to the other, and smiled with delight.

"Pretty," he said, smiling, too; and when she hid behind her hand self-consciously, he laughed again, curled her hand about the handle of the mirror to indicate that she could keep it, and sent her home.

On the pathway she met Kabu. He stood astride it so that she couldn't pass. When she made to push into the ferns by the path, he grabbed at her wrist, and said roughly, "What have you got there?"

"Nothing to do with you!"

"Did you get it from Matene?"

She didn't answer, and he snatched it from her, pulling it vio-

lently so that the swing of his arm took it in a wide arc and it struck a low branch of ngaio alongside the path. The glass cracked right across its width.

"You broke it!" Roimata buried herself at him, flailing at his chest and stomach and head, as she used to when they were little and he had teased her into a childish rage.

He dropped the mirror to the soft ground and captured her arms, holding her until she stopped trying to kick at his hard brown legs and stood sullenly panting in his hands.

"I didn't mean to break it," he said, almost sulkily. "If you had let me see it, I wouldn't have taken it from you."

She spat an insult at him, and his face hardened with anger. He said, "Pick up your precious gift, then. It will be all you have when that pakeha pig tires of you and sails home." And he thrust her roughly astride and went striding down the path to the beach.

The crack in the mirror had made the glass shift slightly; her reflection was ugly and distorted, and looking at it filled her with foreboding.

Fear and sadness began to disturb the dreams, and sometimes the happiness that still lingered afterward would be almost drowned by a contradictory melancholy.

Vicky had begun having frequent

headaches that bothered her at school and interfered with her social life. Maybe, she thought, they had affected her dream-life, too. Or . . .

But the thought that it might be the other way round was too far out. She toyed with the idea of getting rid of the greenstone half-tiki, but she was too caught up now in Roimata's life. Whatever happened, she wanted to be there. She had a sense of something unfinished.

"Let me be your woman," she said. Once before, she had tried to ask Matene to take her as his Maori wife, to cook and clean and wash for him, and to warm him in the cold, sea-scented nights. He had seemed not to understand. But now they could communicate much better. She wanted to belong to Matene, even if it was only temporary, and Kabu thought she did, so — why not?

Matene looked surprised, and his face became the pink color of the long, loose calico gowns the other pakeha had given to their Maori women. He smiled in an odd, half-bearded way, and looked at his hands.

"You have no wabine like the other men," she persisted. "I will be your woman."

"You're very kind," he said at last. "I'm flattered, Roimata."

She didn't comprehend that, and he stumbled over his explanation, using Maori where he could, and trying to find English words she knew.

When she understood that he was saying no, she poured out persuasions in a torrent of Maori mixed with English, but he shook his head and put his hand on her arm to stop her, and pulled something out of his pocket. It was picture, a very small one, of a woman who looked like Matene, pale-haired and blue-eyed.

"You see, I have a wife, Roimata," Matene explained in troubled tones. "I shall be going back to her soon. This is my woman."

Vicky woke feeling ill and sweaty, and her head was full of sound and pain, and her eyes of shooting lights that hurt. She was frightened in a way that had nothing to do with any dreams or any time or place but Vicky Carr's. By noon she was in the hospital under observation.

She heard his voice before she saw him, and it seemed familiar, waking pleasant echoes in her mind. When the two men and the ward's head nurse reached her bed, she barely saw the other man for staring at the tall blond one with the blue eyes.

Matene's eyes.

"This is Mr. Collins," the nurse indicated the other other man. "And Dr. Richmond."

Doctor. Dr. Richmond. The name meant nothing to her, but the face was the face in her dreams.

"I'm going mad," she said aloud, still staring.

He smiled. "I don't think so. Perhaps it feels like it when the head's bad. But we hope to fix that for you."

While they questioned and probed her head and tested her reflexes and her vision, she wondered if this, too, was a dream, and if so, where did it begin? This morning? Or with the accident? Had there been an accident? Had there been dreams? Maybe she was hallucinating.

As her mother was frantically packing an overnight bag that morning, Vicky had snatched the tiki up from her bedside table, trying to joke through a haze of fright and pain. "Can't leave my half-good luck behind." But the impulse was a superstitious imperative.

She took it now from the top of the cupboard by her hospital bed, and held it tightly in her hand. The doctors were conferring quietly.

As they turned back to her, she opened her hand so that the greenstone lay on her palm.

Calmly she said, "Dr. Richmond, were you ever in New Zealand?"

"No. Were you?"

"Yes, for a year. I just got back a few months ago."

He looked politely interested. Then his look sharpened a little as he glanced down at her hand. "What have you got there?"

"Part of a greenstone tiki that I found in New Zealand. The other half is missing."

He stared a bit, she thought, but

the other doctor was getting impatient, and they went away.

But the next day he came in alone and stood by her bed.

"How's the head?"

"Better. Still a bit throbbing. Did *you* order all those tests I had this morning?"

He gave her Matene's smile and said, "I had something to do with it. Sorry if they weren't comfortable."

He pulled something from his pocket, and said, "Your half-tiki intrigued me, because I happen to have one, too. Brought back from New Zealand by my great-great-great-grandfather, if I have the family history right. It's a long shot, but I just wondered . . ."

It was the upper half of a tiki, a small hole drilled near the top for threading on a flax thong, the long pointed tongue protruding from a wide mouth, the three-fingered hands folded on the chest, above a broken edge. She handed him her piece in silence, and he fitted the two together. They both stared for a minute in silence.

Hers was a little worn along the break, and there was a missing chip. But there was no doubt. She had found the other half.

Of course, he had been special to her since the first time she saw him, but now she was special to him, too. He brought some glue to fix the two halves of the tiki together, and a nar-

row black ribbon to hang it about her neck. He dropped by sometimes just to say hello, and they laughed a lot. When her head wasn't aching, Vicky felt very happy.

It was he who broke the news that an operation was necessary, and when she asked him to be there, and to take the tiki with him because she wouldn't be allowed to wear it in the operating room, he took her hand firmly for a moment and said, "Sure. I promise."

He picked up an unopened air letter from her bedside cupboard and studied the scenes pictured on the back of it. "Very nice. From one of your New Zealand friends?"

"A boy I used to know," she said. Gary seemed a very distant memory.

"Does he know you're sick?"

"Not yet. I owe him a letter or two. Maybe I'll write after the operation."

"When it's all over and you're on the mend. Good idea."

Vicky wondered if she would . . .

The ship stood in the bay, and the whalers had rowed out the barrels of oil and the bundles of baleen and had packed their belongings into their sea chests and sent the women back to the village. Roimata stood on the cliff, dressed in the pink calico gown that Matene had given her as a farewell present. She had placed her own tiki about his neck, crying as she tried to explain the very special

significance of the carved figure of the first man, its potential for warding off evil.

Two of the village warriors were going to be sailors on the ship. Kabu had been glowering these past few days, and Roimata suspected he wished he could go, too. But he would be too proud to ask.

Suddenly he appeared beside her, coming from the path with his silent hunter's tread.

"So your pakeha is leaving you! He has made you a fine present, I see. But the stuff it's made of is flimsy, you know. It will tear on the sharp blades of the toetoe grass, and all the sunrise color will turn to a sandy dullness and fade away like his memory of you. I have seen these things before."

"You have not! You have only heard it from others older and more widely traveled than you!"

"Well, it is true, all the same! What good has it done you to be looking at this Matene with your eyes full of longing? Why do you want him when you might have had—" He stopped, looking toward the beach. "Anyway, he doesn't want you anymore," he said, pointing at the brightness of Matene's unmistakable fair head as the man left his hut and walked to the boats at the water's edge, stowing a bundle into one of them. "See," Kabu mocked sneeringly. "He leaves you without a backward glance."

Made rash by hurt anger, Roimata said, "That isn't true. Haven't you heard the news? I'm going with him. He wants me to be his woman forever." She saw the fury in his dark face with fierce satisfaction.

She moved toward the beach, with some desperate idea of begging Matene or his chief to take her with them, just to let her be near him a little longer. She would promise anything if they would only take her with them. There must be some way she could stay with Matene.

Matene spurred her on by turning and staring as though looking for someone, and when she began to run, he waved. Hope was a beating bird in her throat as she reached him, but Kabu had run after her, silently across the sand, his shadow going before him, keeping pace with hers, and as the men turned their heads and one shouted a warning, she looked round and saw the patu poised against the sun, then striking down with terrible force at Matene. The world seemed filled with Kabu's shadow.

The patu came down with vicious speed, Matene moved sharply, his arm jerking, the tiki at his throat shattered in two, and she threw herself at his chest with her arms outspread as a second blow descended. She felt it jar her, with a muffled, thudding sound, and then a terrible noise assaulted her ears and Kabu's shadow disappeared. A great weight seemed

pressed on her head.

She could not stand alone, there was something warm and wet trickling down her neck and soaking the new pink calico. As Matene's arms lowered her gently to the sand, she glimpsed the pakeha chief with a smoking gun in his hand, and Kabu lying at the edge of the waves with blood blooming on his chest like a bright flower.

There was a fine line of crimson on Matene's skin just below the broken tiki, but he was barely scratched. The sun was behind him, and he looked as he had the first time she saw him. But the sunlight faded swiftly into blackness, and this time the rushing sea closed over her forever.

Someone called her name. Matene's voice — receding, then growing stronger. Other voices, then his again. "Vicky! Vicky!" She flickered open her eyes, and he smiled and said, "Good girl."

Good girl, Roimata. Vicky smiled at him and went back to sleep.

"How do you feel, now that it's all over?" Dr. Richmond asked the next day. "You had us worried for a while, young lady. You're as hard to wake as my scamp of a son. Never wants to go to bed, and never wants to get up."

Vicky's breath seemed to stop for the space of few heartbeats.

"You have a son?"

"Sure thing. Like to see him?" He took out a wallet and extracted a photograph.

The little boy was dark-haired, dark-eyed, like the woman with him, both of them laughing into the camera.

This is my woman.

"He's like his mother," she said.

He put the photograph carefully back. "I've come to say good-bye, Vicky. I go on vacation tomorrow, and you should be home quite soon." He smiled, and the pain inside her grew sharper.

"Please," she said, taking the tiki from her neck, lifting it over the bandages. "You take this now."

"Your good luck?" He smiled at her with Matene's smile.

"No, yours. It belongs to your family. I want you to have it."

"If you're really sure, well — thank you. It'll be something to remember you by."

There was a gleam of understanding in his eyes as her mouth wavered, trying to smile back at him. His cheeks were a little flushed, and she thought, He's used to patients falling for him. If only that were all.

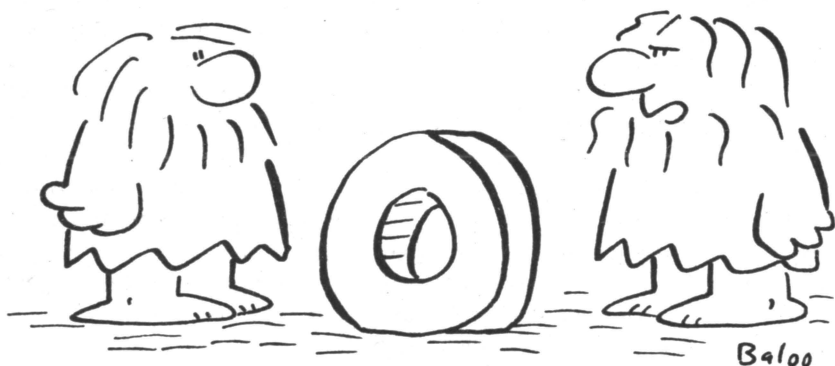
He touched her shoulder lightly and said, "Your luck has held. You're going to be fine, Vicky, and that's a promise. Good-bye, honey."

Good-bye, Matene.

"Good-bye, Dr. Richmond." She took his hand and held it briefly.

"You'd better write to that boyfriend of yours," he said, glancing at the air letter that still lay on the cupboard. "Tell him the good news."

"Yes," Vicky said. "Yes, I'll do that." She picked up the letter and began to open it as he left the ward.



"What dealer prep?"

After the dragon is slain and the princess won, then what? John Morressy ("Stoneskin," June 1984) ably answers this question for us and skillfully shows that there is no "happily ever after," even for heroes.

Some Work of Noble Note

BY

JOHN MORRESSY

Queen Kesren awoke from her solitary sleep, roused by laughter and loud voices from the hall below. She lay for a time with eyes closed, and then she rose and donned her robe.

Cleonce would be up all this night, carousing with his old companions. On the morrow, at council, he would cross and surly, cutting short discussions, ignoring the wisdom of advisors, issuing hasty judgments on important matters. He had acted in this manner more and more of late, and now that Zezmak and Foramel had come, he would only be worse. There was already discontent in the court. Kesren had no fears of palace intrigue — no one would speak openly against Cleonce the Deliverer — but she was saddened by the spectacle of his decay, and the slow decline of the kingdom her father had ruled so well.

Sleep was out of the question now. Denied that oblivion, she decided to go to the chapel. She took no light, for the full moon flooded the upper gallery. A blur of white caught her eye, and she saw her son crouched by a pillar, looking down at the firelit hall, listening to the men below.

At the sound of her soft footfall, he sprang up and ran to her. She drew him close and held him tightly.

"Come to the chapel with me, Orivel. We'll pray together," she said softly.

He pulled free. "I don't want to pray for him," he said, his fists clenched by his sides, his awkward body taut with defiance.

"He's your father. You must," she said, holding out her hands.

"He makes you cry. I've seen you crying."

"He's made me very happy, Orivel."

Unheeding, the boy went on, "I don't like those men who come to visit him. They drink, and they boast, and sometimes they get sick all over themselves. They're old fools, all of them. All they want to talk about is how brave they were long ago, when they were young."

"Don't speak that way. Cleonce is your father and your king. Respect him, and respect the men he calls his friends."

"But they don't do anything, Mother! They only want to talk about the past."

"Don't begrudge people their memories. Sometimes memories are all a person has."

He took her hand, and they went to the chapel, where they knelt side by side. She looked down at his bowed head and tightly clasped hands, and listened to his whispered prayers, but she did not pray. Here in the muted semidarkness, she surrendered to memory.

For a time it seemed that the old tales had come true, and like their counterparts in folklore, the handsome prince and the beautiful princess would indeed live happily ever after. Within a year they had a fine, strong son, and before two more years had passed, a lovely daughter. When the old king, Kesren's father, died and the kingdom passed to Cleonce and Kesren, the people felt a joy equal to their sorrow: they had lost

a wise and kindly ruler, but had gained a valiant protector and the promise of a dynasty.

For many years there were no more children. The prince came of age, and in emulation of his father, went questing for glory. Soon afterward, suitors began to arrive in the kingdom, seeking the hand of the beautiful daughter of Cleonce and Kesren. There were feasts and festivals and tournaments, and at last, on a fine summer morning, she rode off at the side of a bold warrior, to be his queen in a faraway land beyond the dark mountains.

Cleonce and Kesren were not long alone. Their last child, Orivel, was born shortly after this. He had his mother's thick coppery hair and love of learning, his father's ice-blue eyes and sturdy frame. He was a bright and handsome boy, and he brought his parents much comfort.

But while Orivel was still a small child, their happy world began to crumble. A traveler came to court bearing a broken sword and some bits of rusted armor, and told how their firstborn had fallen in combat with a thing that feasted on his flesh and blood and left his bones to bleach in an alien wasteland. In the same year, their daughter's husband heard the call of destiny and went forth in bloody conquest. Her name was linked with his in the curses of widows and orphans, and in the execrations of the maimed and homeless who marked

the wake of his progress. Cleonce and Kesren spoke of her no more.

Orivel grew up in a changing world. He was twelve years old now, clumsy in his overgrown body, confused by the disparity between words and deeds and the unfathomable doings of his elders. He knew the legends of the beautiful princess and the valiant warrior-prince, but he lived among the realities, and to him they were as oil and water. He saw his father as a sottish brute, his mother as a pathetic victim, and he resented them both for making it so difficult to love them.

Kesren felt the tears on her cheeks before she was aware that she was crying. She bowed her head in feigned prayer, covering her face with her hands to hide the tears from Orivel, and after a time she crossed herself and rose. They left the chapel to return to Orivel's little chamber.

As they passed through the gallery, the clatter of a fallen tankard and a loud burst of laughter came from the hall. Orivel reached out to squeeze his mother's hand, but said nothing.

When he was in bed, Orivel said, "Stay and talk with me. Don't go right away."

"It's late. You should be sleeping."

"I want to know — was he really brave?"

"He was, Orivel. They all were."

"And did they do the things they always boast about? Did they really do them, Mother?"

"They did all those things," she said, standing rigid in the doorway for a moment, then withdrawing a step.

"Don't go!" he cried. "You always want to go away when I ask questions about him. Is it all really true, then? About the troll, and the giants? And the dragon? Is it really true?" he asked.

"You've heard the stories a hundred times," she said impatiently. "You don't need to hear me tell them again."

"But are the stories *true*? Did those things really happen?"

She walked to the bed and leaned over to kiss him. "It's time for you to be sleeping, Orivel, not to be thinking about great deeds."

"I want to hear it from you, Mother. He never talks to me about it. He never talks to me at all. And you always try to talk of something else when I ask you about it. Please tell me. People say that you saw all those things, but you never speak to me about them."

"The time hasn't come yet, Orivel."

"Mother, please, tell me now. Are the stories true?" he implored.

It was the moment she had dreaded since his birth, now come upon her so unexpectedly that she was helpless. Always before, she had been able to fend off Orivel's questions, avoiding talk of the past lest she cause it to repeat itself. One son was lost to her because of his eagerness to

emulate his father's deeds, and Cleonce himself was a prisoner of the past. Legends were safe; they could be laughed at and dismissed as the talk of the servants or the boasting of men drunk on memories. The truth was dangerous.

But these were not an idle child's questions. Orivel repeated his appeal, clinging tightly to her hand. She nodded and sat on the bed, ready to tell him all. He was old enough to know the truth behind the legends.

"Zezmak overcame the troll that lived by the river. Foramel subdued the giants of the hills and made them serve the king. And your father slew the dragon, single-handed," she said.

Orivel's eyes were wide. He knew Zezmak as an old man with a bright red clown's face and a belly he could scarcely encompass with his arms. Foramel was stooped and watery-eyed and almost toothless. His father was younger than the other two, but paunchy and puffy-eyed and short of breath. What they claimed to have been was irreconcilable with what they were; yet his mother had never lied to him. "Did you really see these things?" he asked.

"I saw the troll's glove. Zezmak dragged it behind his horse when he returned. Three men could barely lift it off the ground. And I watched Foramel lead the giants in chains to kneel before my father and swear loyalty to him," she said.

"But the dragon — did you see

the fight with the dragon?"

"I saw it all. I was chained to the pillar where the dragon's victims were always left. Cleonce stood beside me, holding my hand, waiting for the dragon to come for me."

"You must have been terribly frightened."

"Just for a moment, when the dragon first appeared. I knew that Cleonce would overcome."

"How could you know that? The dragon had killed a score of brave men before him."

"I knew it as soon as I saw Cleonce. He was smiling, and I knew that he'd conquer, and save me, and we'd marry."

"But smiling doesn't mean anything," the boy protested. "Just because he smiled, that didn't mean he'd vanquish the dragon."

She shook her head and hugged him. "I had seen those other heroes, Orivel, all grim and stern-faced, and then I saw Cleonce, and I realized that he wasn't afraid. That's why he could smile. The others, brave as they were, were still afraid, but not Cleonce. I was glad that it had fallen to my lot to be the dragon's victim, because it would make Cleonce and me so much closer. He wouldn't just be given me as a reward, he'd fight for my life and rescue me, and our marriage would be better than if he'd saved someone else's life and I'd been a stranger, a prize like a casket of gold, or a castle. And I was right to

think so, because we had a happy marriage. It was wonderful, Orivel, truly wonderful."

"It isn't wonderful anymore, though, is it?" the boy said with cold precocity.

"We've lost things that were precious to us ... things and people, Orivel. I still love your father very much, and he loves me. That hasn't changed."

"Why does he shout at you, and talk about the past all the time?"

"Your father won me by slaying a dragon. Now he's king, and must think of raising taxes, and repairing the bridges, and protecting the people in the outlying hamlets from thieves. There's talk of plague, and a murrain among the cattle. People from every part of the kingdom, and from other lands as well, bring problems to him, and the councillors offer different solutions, and dispute among themselves, and he must decide. In the end, he must decide it all, and it's not like fighting a dragon. He said to me once that fighting a dragon was easier than being a king, because a dragon can be killed, but the worries of a king are born anew each day ... like the hydra. Do you know the story of the hydra?"

"I don't care about that. Tell me about the dragon fight," Orivel said eagerly. "How big was the dragon?"

"Just about the length of the great hall, from its nose to the tip of its tail. It was the color of tarnished brass, and it could breathe fire. It came at

sunrise, from the east, and for just an instant it appeared that the sun itself was racing at us. That's the only time I felt afraid. It was so fast, and so huge ... I couldn't imagine any man vanquishing such a creature. But Cleonce never doubted. He dashed out to meet the thing as it came to earth, and he commanded it to go and never to return, or he would slay it."

"What did the dragon do?"

"It was enraged. It breathed out fire, and covered him with flame. But Cleonce wore a coat and gloves of cloth made from a certain stone, a cloth that cannot burn, and he had a cover made for his shield from the same cloth. He came through the fire and smoke and struck the dragon a terrible blow. They fought all day, and just at sunrise the dragon rose, dripping blood from scores of wounds, and flew off to the north, to the place where dragons go to die. Your father was wounded, too, but he looked at the dragon, flying from him, and he laughed. I never heard him laugh that way again ... so free, so triumphant ... and then he struck off my chains."

The boy huddled close to her. "I wish I could know him the way he was then," he said.

She smiled and stroked his forehead gently. After a time, his regular breathing told her that he had fallen asleep. She slipped carefully from his side, pulling the bedclothes close around him, and started back to her

own chamber, but at the doorway she stopped, and then made her way back to the chapel. There she remained in prayer until dawn.

The spring rains were heavy. Roads became impassable, and the Black River overflowed its banks. Early summer was hot and dry, and for a time there was fear of a drought. As harvest drew near, people spoke gloomily of a hard winter ahead. Reports reached the castle of brigands in the forest; of armed riders seen in the western marches; of strange, perhaps magical doings in a remote hamlet.

Cleonce faced the problems of governance with a worsening temper. He drank himself into a sullen silence every evening, and by day he spoke angrily to everyone. He cursed Kesren's father in her presence for saddling him with a drab, worthless kingdom of fearful boors and palace schemers. When Orivel defended his mother, Cleonce denounced them both as intriguers against him. Palace officials began to take sides, and rumors of trouble in the castle spread among the people.

Through it all, Kesren said no word against Cleonce, and would hear no criticism of him from others. She insisted that Orivel respect him as both his king and his father. She spent a good part of every day in the chapel, in fervent prayer.

A turbulent, stormy winter passed,

and in the spring a messenger arrived to tell of Foramel's death. As Cleonce mourned his friend, a second messenger brought word that Zezmak had fallen from his horse while hunting and broken his back. He, too, was dead.

The loss of his old friends seemed to break Cleonce's spirit. He withdrew from affairs of state, leaving things to Kesren and the council. She carried on while he became a wraith haunting the shadows of the castle, seeming to dwindle with the passing days. Kesren gave out that an old injury was troubling the king, and that all were to join their prayers to hers for his recovery.

Then came news of the dragon. It was sighted in the western reaches of the kingdom, and some time later, it was seen in the south, but always it was a faraway blur in the night sky. It might have been a sign, or a vision, and not a true dragon. Only when it laid waste the fields of three villages at harvesttime, and carried off six harvesters, was its presence manifest beyond doubt.

The day after word of these depredations arrived at the castle, Cleonce attended the council. He was pale and his eyes were rimmed with red, but his voice was calm and steady as he questioned the messenger. He did not shout, or show any of his old anger. He listened to the arguments and counterarguments of the councillors without speaking, and when they had

left the chamber, he spoke to Kesren as he had not spoken for a long time.

"This dragon must be slain, and I'm the only one who can do it," he said. "I'll take a few good men, and leave as soon as I can. I'll stay after it until I find it."

"Who will govern the kingdom?" Kesren asked.

He laughed good-humoredly and took her hand in both of his. "You will govern, Kes, and you'll be a better ruler that I could ever hope to be. You've done more good for the kingdom in these past few weeks than I accomplished in all my years of rule."

"Is it wise, Cleonce? Are you ready to face a dragon?"

"I'll be ready by the time I face it. I know what you're thinking, Kes, but

I'll be fit."

"It's been a long time. You had a hard fight then, and you were young and strong. If anything should happen to you, Cleonce, what would we do? We'd be helpless."

"You'll have Orivel. In a few years he'll be the match of any dragon that ever lived."

"I don't want to lose you, Cleonce, not now."

He rose, and spoke without looking at her. "I've been a poor king and a poor father, and a poor husband to you. Now I have a chance to do good for my entire kingdom. This is something I can do — something I must do. Whatever happens to me out there, Kes, I won't be lost."

He left at sunrise on the ninth day

Special offer from the award-winning SF magazine: A full year (12 issues) of F&SF for only \$15.97, saving you \$5.03 off the newsstand price.



- + 11 time winner of the Hugo award for best SF magazine or best editor.
- + Publisher of more Nebula award winning stories (selected by the Science Fiction Writers of America) than any other publication.
- + Winner of the 1977, 1978, 1979 and 1980 Locus polls as best SF magazine.
- + Winner of the World Fantasy Award, 1979, 1982; Balrog Award, 1981, 1983.

Please use the coupon on the reverse side; it is backed by this copy, and removal does not affect the text of the story.

following, with five picked companions. His last words before departing were to Orivel, while Kesren looked on from the top of the steps. Mother and son stood side by side until the little group of riders was lost to view, then they turned and entered the castle.

"Do you know what he said, Mother? If he should fall, Dursindal and Trevane will bring back his armor, and as soon as I'm big enough to wear it, it will be my duty to slay the dragon," Orivel said excitedly. "He trusts me to be his avenger. I will be, too, if it falls to me. But he'll overcome this dragon just as he did the other, won't he?"

She looked at him solemnly. He was just her height now, not as bony

or awkward as he had been a few years before, growing quickly into young manhood. He would be of a size and strength to wear his father's armor in a very short time. "Nothing is certain in this life, Orivel," she said.

"But he's bound to overcome. Did you feel his arm? I never realized how strong he is."

"Your father is very strong and very brave, and I believe he'll slay the dragon. All the same, Orivel, we must not presume. We must pray for him."

"You're always praying, Mother," he said affectionately, "Do you really believe that prayers are answered?"

She smiled, but said nothing. She slipped her arm through his, and together they went to the chapel.

FANTASY & SCIENCE FICTION, Box 56, Cornwall, CT 06753 7521

- ☐ **Yes, send me 12 issues of F&SF, the award-winning magazine, for only \$15.97, saving \$5.03 off the newsstand price**
- ☐ **Check here if you would like to extend or renew your current sub.**

Name _____

Address _____

City _____ **State** _____ **Zip** _____

Outside the U.S., please add \$3.00 for postage. Please make all checks payable in U.S. dollars.

Allow six weeks for delivery of first copy.



HARLAN ELLISON'S Watching

Installment 7: *In Which An Attempt Is Made To Have One's Cake and Eat It, Too*

By this time we will have come clean with each other. We will have ceased trying to flummox one another. You will reluctantly admit that these are not actually "reviews" of films, because The Noble Fermans assemble the goods three months before the magazine is published; and that means that even if I review *2010*, *Supergirl*, *The River*, *Dune* and *Paris, Texas* (all five of which I'll see next week, 12-18 November) immediately, those films will have opened and, in some cases, vanished before you get the dubious benefit of my appraisals. So insofar as being a theater guide to what you should lay out money to see, this column is academic. You'll have guessed well or badly on your own; you'll have been conned by advertising; or you'll have been warned off by word-of-mouth or by Roger Ebert. And for *my* part, I will admit that these are not "reviews" in the way, say, Ayjay's book columns serve you, because the books are still out there three months after pub date; but the films may only be accessible in a second-run house.

By reviewing what is coming out as far in advance of their national premieres as I can, I cut down the time-lag; and in some instances — *Repo Man* and *Gremlins* are the most recent examples — I can abet your own desires by talking up the former,

Copyright © 1985 by The Killmanjaro Corporation

which got a second pass at distribution, or by warning you off the latter, which hung around like a bad case of stomach flu for the entire summer, at least till they'd moved a million of those vile gremlin soft toys off the shelves.

But what is truly being done in these columns is what I like to think of as essays in the realm of film criticism. The discussion of trends, subtexts, effects on the art form and on the commonweal, I suppose in an attempt to broaden your appreciation of film as worthy art. Thus, when I read Gahan Wilson's column in *The Twilight Zone* magazine, and Gahan quite properly wails in pain at the glut of films he has endeavored to see, in order to review, during the summer avalanche, and he professes to going blind and insensitive after seven days of two screenings a day, I sympathize without reservation. And finally, as it must to all men, overload comes to Charles Foster Ellison; and I simply admit that I cannot see everything available in this genre in your behalf; and also admit that it may not be a race worth the candle to *attempt* to see them all, if the best I can do is a mere squib relating basic storyline topped with a smartass one-punch evaluation.

So you get no thoughts from me on *The Last Starfighter*, *Sbeena*, *Mutant*, *Red Dawn*, *Dreamscape*, *Conan the Destroyer*, *The Philadelphia Experiment*, *Night of the Comet* and *The*

Neverending Story. By the time those films got to the screening windows, I couldn't see the forest for the trees. (Understand: I am a movie freak, and in order that I don't overload on sf/fantasy films, I see a great many mainstream films, as well. And I must confess that in a world where I can enjoy *Garbo Talks*, *Amadeus*, *A Soldier's Story*, *The River* and *Beverly Hills Cop*, I choose not to pollute my precious bodily fluids with *Sbeena* and *Conan* and films notable only by the number of teen-age female breasts available for leering at by microcephalic schoolboys.

Eschewing semiotics and structuralism, techniques better left to the functionaries who rapturously give us shot-by-shot analyses with a meticulous examination of the firing of cinematic codes operative within a given segment, rife in journals such as *Camera Obscura* and *Wide Angle*, I try to look not only at the primary entertainment, storytelling qualities of films, but attempt to consider them as reflections of cultural phenomena.

Movies have always been slow to pick up on new trends and societal predispositions — breakdancing flicks tumbled onto the cineplex screens two years after the fad was hot — but by the time they hit your neighborhood they resonate to attitudes already concretized among the general population. Years after the effects of feminism had manifested themselves in a widespread confusion by men as

to how they should now react, publicly and privately, movies reflected their quandary with films of deliberately cultivated sadism and violence toward females. Foreshadowing the unexpected support of Reagan by voters in the heretofore liberal 18-to-35-year-old demographic, such films as the despicable *Risky Business* come late to an observation that this target audience doesn't give much of a damn about the starving children of Ethiopia ... they want a sinecure at Dow Chemical, complete with a comprehensive retirement plan. After-the-bomb movies are big right now; and only thirty or so years after the initial fears of nuclear holocaust began to dampen our national spirit.

No film is ever made in a vacuum. It is a murky shadow in the cultural mirror. And thus I am glad we no longer lie to each other that what *you* want is a rating system for what you'll see this weekend, that what *I'm* offering here is an exhaustive series of comments on trivial cinematic exploitation exercises.

Yet synchronistically, my concern this outing is in precisely that quarter: the excuse currently proffered by many filmmakers that we should not judge their product too harshly because it *is* trivial. Don't take it seriously, we are told, it's only a movie. Excuse as explanation: they want their cake, and they want to eat it, too.

As the subjects of this month's sermon, I select *STREETS OF FIRE* and

CLOAK AND DAGGER (Universal) and *INDIANA JONES AND THE TEMPLE OF DOOM* (Paramount). All share a less-than-salutary press, and all share a common apologia. Which is: "This isn't real-life, folks, it's just a cartoon. So you can't legitimately lynch us for Sins Against Art that serious films may commit."

First example: *Indiana Jones and the Etcetera of Ditto*. There will no doubt be those benighted few who will find fault with this film because it seems to be nothing more than a show-off congeries of tricks, stunts and gags we have learned were, for the most part, left over from *Raiders of the Lost Ark*. These same viewers with disdain will also, no doubt, chastise Steven Spielberg for a certain, how shall we put it delicately, McMartin Pre-School attitude toward children.

They will say that the character of Willie Scott (played by Kate Capshaw), the Shanghai songstress unwillingly dragged into Dr. Jones's latest bloodletting escapade, is demeaning to women because through most of the film she runs around in ever-decreasing circles screaming in terror. They will say that the laws of rationality, not to mention those of gravity and physics, are defied by a three-foot-high Chinese kid dropkicking fanatical, highly-trained, six-foot-four *thuggees*, and by a mineshaft tram as it leaps its tracks, soars through empty space and lands nicely on rails be-

yond the abyss. They will say that the depiction of Third World peoples is racist because they spend most of their time quaking in fear or slaving with deranged evil. They will say there is too much gore because people are shot in the forehead, run through with sabers and the occasional kris, ground under rock-pulverizing wheels, burned alive, have their hearts torn still beating from their bodies, are gnawed to shreds by crocodiles, get smashed against rock walls, blow up in car crashes and otherwise meet their demise through means both mundane and innovative, as with one Willy Oriental Gentleman who gets skewered with a rack of shish-kebob.

Those who object on these grounds, well, let's just say their bread ain't completely toasted.

They have lost touch with reality.

Which is not to say that *Indiana Jones and the Temple of Doom* has so much as an elephant's fart to do with reality.

Now I happen to like this film, but then I also like liver and onions and abominate sushi, so what does that say about me? I accept with a child-like willingness the suspension of my disbelief, in order that I may more perfectly resonate in contiguity with the intelligence that conceived this adventure: the mind of a thirteen-year-old boy commando, tipsy with dreams conjured by Sir Walter Scott, H. Rider Haggard, Richard Halliburton, Lester Dent, Walter Gibson, Ed-

mond Hamilton and Frank Buck. Lest you doubt my sincerity in this giving-over of myself to this metempirical state, let me reassure you by stating that I *do* understand why it is that a piece of buttered bread always falls to the floor buttered-side-down. By the same token, and using the same rudimentary knowledge of gravity, I understand that when Indy, Short Round and Willie fall out of that trimotor in a rubber life raft, they should by all rights turn upside down. (Which would have added a dimension to the fall that would have made the stunt even *more* exciting, because the raft would have served as a kind of parachute, and they would have been hanging from the life raft's perimeter rope as they dropped toward the Mayapore foothills.) But that's an exercise in logic, the introduction of reality; clearly an inadvisable undertaking, as it would jangle against the impossible view of the received universe that informs such films.)

So I do not sit by the campfire with those who pick nits. I swallow the adventure whole; and if I find it far less of an exhilarating experience than its predecessor, *Raiders*, it is nonetheless a nifty boy commando imago.

But cake-eating/cake-having disingenuously rears its head when the reviews start coming in. Perhaps it was because of an independent realization on the part of many critics that a certain meanspiritedness was subcutane-

ously present passim the Spielberg-Lucas *oeuvre* and that it was beginning to surface. Released but a few weeks before *Gremlins*, this film drew only foreshadowings of concern that spiraled up into hysterical gardyloos when *Gremlins* made its debut. (The phrase that best synthesizes critical alarm is the one I quoted last time, from David Denby's review of *Gremlins* in the June 18, 1984 issue of *New York* magazine: "I'm tired of being worked over by these people ... the master's head-slamming *Indiana Jones and the Temple of Doom*; now this creature bash, which flows with the same black blood as the Thuggee rites in *Indiana Jones*.") But it was a trend, and when groups dedicated to protecting children from Bad Influences began pillorying Spielberg for the child-labor scenes in *Temple*, Spielberg and allied apologists riposted with the disclaimer, "It's all in fun. It's not supposed to be real. It's a cartoon."

Bear that line in mind.

Second example: *Streets of Fire*.

Of-used phrases no longer available to me: "Director Walter Hill can do no wrong." Remember *Hard Times* (which he also co-wrote) in 1975; *The Driver* (that shamefully undervalued homage to the Parker crime novels of Donald Westlake writing as "Richard Stark") in 1978; the extraordinary production of *The Warriors* in 1979; *Alien*, which he co-produced in the same year; *The Long Riders* in

1980; the absolutely paralyzing terror of *Southern Comfort* in 1981; and *48 Hours* in 1982, providing the perfect debut vehicle for Eddie Murphy; remember those films? Films of originality, incredible movement and power; artistically conceived with a core understanding that they must entertain first and convey philosophical subtext second; filled with fresh insights, and joyously overflowing with images that continue to smolder long after you've left the theater.

Of all the directors I ever wanted to work with, Walter Hill has been for me, as a scenarist, the Impossible Dream.

I'm such a goggle-eyed fan of Walter Hill's work that I had trouble, for at least the first half hour, accepting that *Streets of Fire* is as dreadfully emptyheaded as it appeared to be. But as we say in the world of periodonture, *Streets of Fire* masticates the massive one. My gut aches when I say this, but it is pure crap from start to stop. I simply cannot understand how ~~WalterfercbrissakesHill!~~ could have done a film this vapid. *The Warriors* was an astonishing exercise in surrealism masquerading as a gang rumble flick; so far ahead of its time that it caused riots when it opened: an augury of urban malignity that made popcorn sociology like *The Blackboard Jungle* and *Rebel Without a Cause* recede into the realm of show biz melodrama when they belong. It was a tough, yet poetic, styl-

ized yet mimetic, fantastic yet naturalistic warping of perceived reality that remains as fresh today as the day it was shot.

And for some goddamn dumb reason Walter Hill chose to take his success with the flawed *48 Hours* (ironically, the weakest of his works) and invest it in a production so sophomoric and purely lamebrained that reason founders. He has, in effect, remade *The Warriors* badly. Reportedly given carte blanche by Universal to make any film that piqued his fancy, within twenty-four hours after *48 Hours* broke boxoffice records, Hill signed the deal for *Streets of Fire*. He is one of the few truly intelligent American directors unhampered by delusions of *auteurism*. His comments about what he was trying to do with *Streets*, in prerelease interviews (notably in an interview he gave to Kay Anderson in the September 1984 issue of *Cinefantastique*), were astonishing:

"I've always been struck by the morality fables of the Middle Ages, which take place in a framework that looks very real, but in which the events could be outside of reality. Our fantasies, however, tend to be extrapolated into another type of technology, usually futuristic. But if you tell people the film is 'on an interior landscape,' they look at you with question marks. In an unfamiliar setting, people pay attention to the background, trying to orient themselves,

instead of just glancing over the familiarity of a here-and-now backdrop."

In those few phrases Hill codifies the esthetic for fantastic film, a series of concepts that the Peter Hyamses and John Carpenters of the world never seem fully to comprehend.

Yet even with his head on straight, and his sensibilities well-ordered, Hill has turned out an expensive exercise in babble. With bubblegum heavymetal new-wave trash music mixed so badly that everything comes up succotash; with cinematography and production design that are the equivalent of purple prose, much of it in a ghastly roast beef red; with mindless violence and a plot that had audiences across the country roaring with unintended laughter; with performances by drone children who must think Stanislavski is a triple-decker sandwich one might order at Nate'n'Al's or the Stage Deli; with nothing going for it save Diane Lane's jailbait sensuality (and on the evidence of her first dozen films, apparently that's where her thespic abilities end) and newcomer Amy Madigan's gritty interpretation of the asskicking reiver McCoy (a part originally written for a guy), *Streets of Fire* was the big Holiday Bomb for Universal. They had the highest expectations, outdid themselves with the kind of hype advertising that should have resulted in queues as long as the Children's Crusade, the videos were omnipresent on MTV,

they block-booked it for saturation play ... and it went into the dumper so fast it produced a Doppler that could shatter cardboard.

Now we're not talking duds like De Palma or Arthur Hiller (whose batting average is three good films in a thirty-year career, currently onscreen with *Teachers*, which ain't one of the three). This is *Walter Hill* I'm talking about!

Yet even with his keen understanding of what it takes to create that special interior landscape of magic realism, Hill's conception is superficial and spavined.

And the apologia was entered even before the judgment of critics and audience came in. On the jacket of the album of music from the film's soundtrack, Hill has a note dated May, 1984, that reads as follows:

"*Streets of Fire* is, by design, comic book in orientation, mock-epic in structure, movie-heroic in acting style, operatic in visual style and cowboy-cliche in dialogue. In short: a rock'n'roll fable where the Leader of the Pack steals the Queen of the Hop and Soldier Boy comes home to do something about it." And he tops off the justification with a quote from Borges: " 'A quite different sort of order rules them, one based not on reason but on association and suggestion — the ancient light of magic.' "

Walter Hill, heretofore a filmmaker on the highest reach of innovation

and intellect, has made a film about which the most salient he can say is, "It's a comic book, a parody."

Bear that line in mind.

Third example: *Cloak and Dagger*.

Remember what I said earlier about motion pictures — which should be on the cutting edge of cultural phenomena — coming in late as an octogenarian struggling uphill in terms of fad subjects like breakdancing, CB radio talk, punk clothing, etcetera? Well, *Cloak and Dagger* hopped onto the scene all brighteyed and bushytailed with videogames as a major element, as if it were five years ago and we hadn't seen Atari, et al, gasping for survival, with videogame arcades manifesting the business equivalent of cardiac infarction. Fresh concept, very fresh.

A remake of the 1947 suspense film *The Window* starring the late Bobby Driscoll (for which he won an Oscar as best child actor), based originally on a Cornell Woolrich short story, *Cloak and Dagger* is a contemporary updating of the "imaginary playmate" trope. The current Bobby Driscoll, *E.T.*'s Henry Thomas, is one of those mythic whiz kids we see on the cover of *Time* and *Business Week*: imbued with a natural facility for computerstuff that is supposed to shame those of us who still use a manual typewriter into feeling as though we're Cromerian. He is pals with a Bondian father-figure spy named Jack Flack, protagonist of the

eponymous fantasy role-playing game *Cloak and Dagger*. The kid's dream life overlaps the real world on the occasion of his witnessing the murder of an FBI man; and the spies come after him. Jack Flack appears onscreen in the flesh (a dual role for the always interesting Dabney Coleman as the double-ought adventurer and as the kid's father) and advises him how to escape danger.

There isn't much more to it than that, and taken on its own terms it's a frothy confection no better or worse than many another such matinee offering. It's the kind of flick that would have been a cute B feature back in the Forties. Not that a budget in the multimillions should recommend for greater attention a film this slight, but when a movie costs this much, was touted this heavily, and had such solid studio support, and it doesn't draw an audience and is quickly pulled, out come the rationalizations. Which wouldn't hold our interest any longer than alibis usually do, save that once again the apologists countered critical attacks with the now-familiar threnody, "It's not supposed to be realistic; it's just sci-fi fantasy, you know. A cartoon."

And at last, having set this up with examples, we come to the core of the contestation. *Are* these cartoons? Should they be judged on less exacting grounds than "real" movies? Why is it almost always a film of fantasy or sf that gets dismissed in this way?

Does the audience swallow such disclaimers?

Let me first establish — on your behalf — feelings of animosity and disgust at the mendacity inherent in this concept of "cartoon." Whenever someone hits you with a conversational shot that is crude or is intended to hurt, and you bristle, the shooter quickly throws up his/her hands and tries to get you to believe, "I was only kidding. It was all in fun. Boy, are you overreacting. You mustn't take it seriously, it was just a joke." Well, we *know* it wasn't any such thing. It was a snippet of truth slipping past the cultural safeguards that keep us dealing with one another with civility. It was for real. Similarly, when such films as *Streets of Fire* and *Gremlins* and *Temple of Doom* are made, we are expected to take them seriously enough to plunk down five bucks for a ticket. When they fail to deliver what they've promised in all those tv clips, and we express our anger at having been fleeced, the shooters tell us we're overreacting and we should feel a lot better about losing our five or ten or whatever amount they got out of us, because it was all a gag.

I wonder how well they'd take the gag if we paid for the tickets with counterfeit bills. Or pried open the fire door at the theater and sneaked in with the entire Duke University Marching Band. It was all a joke, fellahs; don't take it so *seriously*; gawd, are you overreacting!"

No, they cannot have that cake and eat it, too. If we are expected to look with solemnity on all the super-hype that works as support system for even the least of these films — short films on *The Making of Cloak and Dagger*, or a dozen others; clips on *Entertainment Tonight* that take us behind the scenes; items the pr people have cleverly slipped into the NBC, CBS and ABC nightly news programs with some pseudo-“event” cachet; trailers in movies houses; four color lithography on those double-spreads in every publication from *TV Guide* to *American Film*; all the primetime crashbang commercials; the billboards; the endlessly imaginative *apparatus* of publicity that whelms us — then they cannot, dare not, must not, had damned well *better* not, come at us with cop-out cries of “We was only foolin’, folks!”

As for the morality of telling us a live-action feature is a “cartoon,” I must enter in your behalf even greater disgust and rancorous feelings. A *cartoon* is a cartoon! And a cartoon is a simulacrum of live action. They may not, at risk of tar and feathers, wriggle with that back-formation. They cannot tell us that first came reality, then cinematic reflection of reality, then cartoon interpretation as simulacrum of reflected reality, and then live-action as parody of cartoon interpretation of reflected reality! They are simply lying. It has as much validity as George Wallace nattering on about

“state’s rights” when what he’s really saying is, “Let’s keep the niggers in chains.”

It is the most repugnant, vilest sort of dissembling; and that so many filmgoers and alleged movie buffs (like Bill Warren and Steve Boyette) go for that okeydoke, is disheartening. For shame, youse guys!

Which leads me to the final consideration of this essay, which is *why* does this “cartoon” cop-out always seem to attach to the sort of films one finds reviewed in a science fiction or fantasy magazine?

I think the answer contains the deepest sort of insult.

Because sf and fantasy have *always* been considered trash by “serious” filmmakers, the sort of stories that a director chooses to film as a lark, not to be taken as seriously as his/her “important” work, it follows that dismissing a failure and the fools who went to see it as a cartoon intended for cartoon-lovers, is logical. No one ever heard the makers of, say, *Gandhi*, suggest to its critics that it wasn’t intended as meaningful, that it was just a lark. Not even a Dirty Harry flick gets that kind of write-off. Oh, perhaps, it might extend to the last ten years’ James Bond travesties, but I cannot think of too many other candidates for the life-as-cartoon award.

But “sci-fi” and fantasy are clearly marketing fodder; visual aids to sell gremlin soft toys; loss-leaders intended to lure us to the popcorn and
(to page 121)

Here is the stunning conclusion to Damon Knight's sf thriller about the desperate effort to find and destroy an alien horror on board the sea-going construction known as. . . .

CV

(3rd of 3 parts)

BY

DAMON KNIGHT

SYNOPSIS, PARTS 1 & 2

In the year 1998, a floating construction called Sea Venture, or CV for short, is on its second voyage around the North Pacific Gyre, a system of ocean currents that will take CV from San Francisco to Hawaii, Guam, the Phillippines, Hong Kong, Tokyo, and back to its starting point. Sea Venture is not a ship; it is a "Prototype Open Sea Habitat," intended as a possible alternative to colonies in space. It has no propulsion except for "windstacks" that add a little to its speed; it is submersible and uses undersea currents for steering.

Among the passengers and crew are Stanley Bliss, the chief controller, an ex-Cunard man; Jim Woodruff, a retired auto dealer, and his wife, Emily; Paul Newland, a guru of the L-5 movement, who has been having sec-

ond thoughts about space; and John Stevens, a professional assassin, assigned to kill Newland.

Newland and his nurse-companion, Hal Winter, are given a tour of the "perm section," where the permanent residents of Sea Venture live, by Ben Higpen, the mayor. They also visit the marine science section, where Randy Geller shows them a manganese nodule dredged up from the ocean floor. When Geller cracks the nodule, he discovers that it contains an australite, a kind of hollow glass meteorite. The australite is cracked, too, and something invisible escapes from it.

A day later Geller collapses and is attended by Dr. Wallace McNulty, the resident physician. McNulty is baffled by Geller's symptoms. The next victim is Yvonne Barlow, Geller's boss in the marine section; then

a steward, Luis Padilla.

The thing that has escaped from the australite is an intelligent energy creature that lives as a symbiote in the brains of other organisms. It cannot communicate with its hosts, or influence their actions directly, but it can make certain simple improvements in the electrical networks of their brains. Each new victim feels a momentary faintness when the symbiote enters it; when the symbiote leaves, the victim collapses.

Inhabiting the brain of Julie Prescott, a passenger, the symbiote experiences her sensations when Stevens makes love to her. Stevens becomes the next victim, followed by Paul Newland.

Another victim, Mrs. Malcolm Claiborne, knows that she has been invaded by the symbiote, and leaves her husband in order to avoid infecting him. She wanders in the lower decks until after midnight, then goes to the deserted Sports Deck, where she meets Norman Yeager, a computer technician, who lets her stay in his room. In the morning, when the maid enters, Mrs. Claiborne collapses.

Finding that Newland is convalescing in the next room, Stevens is amused enough to strike up a friendship with him. Stevens no longer knows whether he wants to kill Newland or not, and he is intrigued by the thought that Newland's life hangs on an essentially whimsical decision of his own.

Ten days after the beginning of the "epidemic," the first victims begin to recover. McNulty tells Bliss, "I think we're out of the woods." But he is wrong.

Disturbing personality changes begin to show up in the recovered victims. Geller goes back to the marine lab, discovers that he no longer believes in what he is doing, and walks out, slugging a co-worker on the way. A steward, Luis Padilla, steals some jewelry from a passenger. Incidents of violence begin to mount; panic is growing in Sea Venture.

Emily Woodruff, who has a history of mental illness, begins to hear a creaking sound whenever she is near the host of the symbiote. The sound is associated in her mind with her dead son, Danny, who was killed while playing with his favorite toy, an abandoned grocery cart. Geller and Yvonne Barlow, who has also left the marine lab, suggest that McNulty use Emily to identify the host, then knock him out with a hypodermic and quarantine him. Reluctantly McNulty follows this advice.

Three days later the quarantined man, Roger Cooke, goes into convulsions. When McNulty enters the room with a nurse, the symbiote escapes. Cooke is dead.

At a staff meeting, Yetta Bernstein proposes a way to get rid of the symbiote. A boat drill will be announced. When everyone is in the lifeboats, they will be kept there until someone

collapses. Then the whereabouts of the symbiote will be known, and other passengers can be released. In order to keep the symbiote from entering all the passengers on its boat and making them collapse, Bernstein proposes a system of volunteers who will enter the boat one at a time, to replace the symbiote's victims.

Norman Yeager, who has a juvenile fixation on Mrs. Claiborne, manages to get himself assigned to her lifeboat. To his dismay, she is removed from the boat because she has already had the "disease," which apparently does not strike the same person twice. In order to get off the boat and follow her, he pretends to collapse. The symbiote enters him before he is taken to the hospital annex, where the symbiote leaves him and enters Dr. McNulty.

At a staff meeting, the symbiote listens to the plans being made against it and then enters the chief of engineering, Dan Jacobs. McNulty collapses.

Hal Winter, now a volunteer security guard, is attacked and beaten by two teenagers late at night. When Winter fails to come home in the morning, Professor Newland calls John Stevens and asks him to investigate. Stevens finds that Winter is in the hospital with a concussion, and sees this as a providential opportunity. He takes Newland down to the Boat Deck, on the pretext that Winter has been injured there. Then Stevens

stuns Newland with a blow to the head, puts him into a lifeboat, and sets the timer to launch the boat automatically.

T

43

here was a blinking red light on the console. Ferguson said to Bliss, "We have a door signal from Lifeboat 53."

"Another malfunction?"

"Probably."

"Send a person down to check it out."

A few minutes later Ferguson exclaimed, "Now we've got a launch signal from the same boat!" He pressed buttons rapidly. "No status signal," he said after a moment. "I think it's really launched, although how that could happen—"

Nothing but rain and spray was visible in the windows or on the television screens. "See if you can pick up anything on radar."

"Too much chop," said Ferguson. "There could be a dozen lifeboats out there and we'd never see them."

Without waiting for orders, Stuart was speaking into her microphone. "Sea Venture calling Lifeboat 53, do you read? Come in, Lifeboat." After a while she turned and shook her head.

Bliss stood where he was, trying to look as if he were thinking. Good God, what was he going to do? What would Nelson have done? If the lifeboat had actually been launched, eith-

er it was a malfunction, meaning there was nobody aboard, or else someone had managed to launch it deliberately. In that case there was a small but measurable possibility that the passenger was carrying the parasite.

What next? There was no drill for Sea Venture to retrieve a lifeboat; the designers had assumed that if the boats were launched, it meant that Sea Venture was foundering. The only thing he could do was to launch a second lifeboat, but that meant doubling the chance that the parasite would get away. It would be a dicey thing for anyone to get from one lifeboat into another in this weather; if the first boat turned out to be empty, he might have drowned a man for nothing.

Stuart said, "Chief, Quinn reporting from Lifeboat Bay 53. The boat's gone."

"Get me the hospital annex."

"Annex, Fenwick," said a woman's voice.

"This is Chief Bliss. Have you had a new epidemic patient in the past half hour?"

"No, sir."

"Call me the minute you do."

An hour went by before Stuart said, "Call for you, Chief. It's Fenwick at the hospital annex." Bliss thumbed over the phone. "Bliss here."

"Chief, you asked me to call you as soon as we had another epidemic patient. One just came in. Her name is Gearhart."

"No mistake about the symptoms?"

"No, sir." Her voice sounded offended.

"Thank you." Bliss turned to Stuart. "Send this on the emergency channel. 'Lifeboat accidentally launched from Sea Venture at' — give the position and time. 'May have passenger aboard.' Keep sending that until you get a reply."

"Yes, sir."

Newland awoke, dizzy and in pain. At first he did not know where he was or how he had got there. He was sitting in his wheelchair, wearing nothing but pajamas, and he was cold, and being rocked back and forth, and there was a throbbing pain at the side of his head: When he put his hand there, he could feel a huge tender swelling.

Then he saw the yellow ceiling and the blue seats, and he thought, I'm in a lifeboat. But he did not know why. Hal had been hurt, that was it — the thought came back with a pain sharper than the one in his head. And he had called John Stevens. And that was all; the rest was gone. Had something happened to Sea Venture? Then why was he in a lifeboat by himself?

He drove his chair up to the console and looked out at the gray sea. The boat was rocking in the waves, throwing him from side to side with each motion. Newland managed to lever his body out of the wheelchair and into the pilot's seat; the effort

left him weak and dizzy.

When he turned the wheel, the blunt nose of the lifeboat came around into the waves. Now the rocking motion was from bow to stern, and the gray water slapped up over the portholes. He peered through the flying spray, hoping to catch sight of Sea Venture, but saw nothing. He continued turning the wheel until he had made a circle. The gray ocean was empty.

It occurred to him to look at the clock. It was ten after twelve. It had been about seven in the morning, he remembered, when he had called John. So he could not have been in the boat more than five hours. How far could he have drifted in that time?

He found the radio controls, switched on the receiver, and tuned it up and down the band. Nothing but static. Which were the emergency channels? He could not remember. He turned on the transmitter and said, "Mayday, Mayday. This is Paul Newland in a lifeboat from Sea Venture. I don't know where I am. I left Sea Venture about 7:30 this morning. Please help me. Mayday, Mayday."

The boat rocked and plunged as it crossed the waves. Newland strapped himself in. His legs were hurting him very much.

44

Carl Nohrenberg went through the metal detector and the explosives

sniffer, showed his ID to the marine guard, and entered the Oval Office at precisely 8:15. The president, as usual, was sitting behind the Mickey Mouse figures at his desk, impeccably dressed, ruddy, cheerful, and smiling.

"Well, what have you got for me this morning, Carl?"

Nohrenberg turned over a page. The president always liked a couple of pieces of good news to start off with. "We have an advance copy of the Walter Commission report. They're going to exonerate Rickard."

"Fine, fine. Send him a fax of congratulations — no, never mind, I'll call him myself. And nowww," he drawled, with a grin, "what's the bad news?"

Nohrenberg smiled in return. "Not exactly bad news, Mr. President, but we're getting some more pressure on behalf of the people on Sea Venture."

"Firestein, Greaves, and about fifteen others?"

"Yes, sir, and our thinking is that it would be a good idea to accommodate them. I have Admiral Penrose penciled in to talk to you about it at 10:30. If you agree, he could have a helicopter carrier there in five to six hours."

"O.K., I'll talk to him. Say, that reminds me of the one about the captain whose ship went down in a storm, and the next morning he found himself floating on a raft with this parrot...."

. . .

"What happened to you, lad?" said Hartman.

Winter tried to smile. His head was wrapped in bandages, and there was a deep discoloration under one eye. "I don't remember. I must have forgotten your advice. What about Ned Mulhauser — my partner? They won't tell me anything."

Hartman hesitated. "He's a bit worse than you, but he'll be all right," he lied. In fact, Mulhauser had serious internal injuries and was not expected to live.

"That's good," said Winter. "Will you call Professor Newland and let him know where I am?"

"Yes, I'll do that. And I'll be back to see you soon."

Hartman tried to call Newland's suite; there was no answer. That seemed odd. He went up to the Signal Deck and knocked on the door, waited, then tried the knob. The door was unlocked. The room was empty.

Seven hundred was when the home office generally liked to call, for its own inscrutable reasons. Colford, the general manager, was very polite and helpful, but Bliss had a feeling that he did not understand the situation. "Mr. Bliss," he said this morning, "I think I'd better tell you that we've had representations from the White House on behalf of eighteen of your passengers. They would like to be assured that you'll find some way to contain this epidemic

before you reach Guam."

"I can't promise that, Mr. Colford."

"Or," said Colford, "that in any event you'll allow certain passengers to debark, including those eighteen whose names I've already mentioned. Now I don't think that's an unreasonable request. Do you think it's unreasonable, Mr. Bliss?"

The trouble was that he couldn't tell Colford the whole truth, because he would not be believed. If he started to babble about intelligent parasites and so on, he was perfectly sure that Colford would give him the sack. Then Bliss would have to refuse to surrender command, and there would be the devil to pay. "No, that's not unreasonable," he said.

"Now, I'm told that the navy is going to dispatch a helicopter carrier to rendezvous with you and take on your eighteen passengers, or thirty or forty, whatever it may be — I leave that up to you, Mr. Bliss. And they'll keep those people in quarantine until they're sure there's no problem, and then land them ashore. Your ETA at Guam is what?"

"Thirteen February," said Bliss.

"All right, then, will you make the arrangements, please? And, by the way, the helicopter will also bring you some medical people; that ought to relieve your mind."

"Yes," said Bliss.

Steven's attitude toward Julie was

undergoing a change that puzzled and disturbed him. He was discovering an absurd beauty in certain aspects of her face and body that had seemed quite ordinary before. Apart from that, he found himself thinking with fondness of her as a person; he wished her well, and wanted to preserve her from harm. It was not love, he was quite sure, but it was something rather similar, and it was this that had deterred him from taking his own life at some convenient moment, as he had fully intended to do after Newland's murder.

That afternoon, in his bed, she murmured, "What do you want?"

"This."

"Nothing more?"

"No. What do you want, Julie?"

She was silent a moment. "I think I'd like you to tell me the truth."

"About myself?"

"Yes."

"Suppose I were to tell you that I'm a criminal?"

"It wouldn't surprise me. What kind of criminal?"

Stevens looked at her. "You really do want to know? Well, then, I am an assassin. That is my profession. I was paid to come on this voyage and kill someone. Does that satisfy you?"

"I don't believe it," she said. Then, looking at his eyes: "Yes, I do. Who were you supposed to kill?"

"That I don't have to tell you."

She nodded. "When are you going to do it?"

"It is already done."

She said, "Now I don't know what to believe. Nobody has been killed on Sea Venture." But he saw that she knew it was true.

"How do you feel about it?"

"About being an assassin? I feel that it is a foolish way to spend one's life."

"Only that?"

"What do you want me to say, that I repent my misdeeds? I don't. I think the world is much better without certain people, but that's not the point. The only thing I am sorry for is that my life has been senseless."

"Mine, too," she said after a moment.

At sunset they were standing on the Signal Deck near the bow, looking out at the darkening sea and the rim of orange fire.

"Is that a ship?" Julie said.

Stevens shaded his eyes with his hand. "Where? Oh, I think I see it. That little speck." His heart jumped, just for a moment, when he thought it might be the lifeboat. "They are looking at us, too, I suppose, and congratulating themselves not to be here. When they get home, they'll tell their friends, 'We passed within ten miles of Sea Venture.' "

It couldn't be the lifeboat, of course; they wouldn't even be able to see it from this distance. He wondered if the old man was dead by now; he must be. Why hadn't he

made sure? Probably, Stevens thought, because he didn't want to be sure. He had wanted Newland to have a chance, even if only one in a hundred. If Newland were to win, if he were to be found alive, that would be another signal, the one Stevens was waiting for now.

They turned and began to walk around the pool. "Do you think we're going to make it?" Julie asked conversationally.

"The human race? I would say that depends on whether we deserve to survive."

"That's pretty cynical."

"No, it is very idealistic. There is a way in which someone here on Sea Venture can save humanity very simply, if he chooses; the only question is, will he do it?"

'And what might that be?'

"There are occasions when someone knows he is the carrier of the parasite, because no one else is near enough to the last victim. At that moment, that one person has the option of saying, 'Please clear a path for me to the passenger entrance and open the door.' "

"I see. And step out? Very simple."

"Yes, very simple."

"Would you do it yourself?"

He shrugged. "If I answered yes, it would be braggadocio. Since I have already had the disease, I am not likely to be called upon. Nor are you. So we can theorize in perfect safety, and turn our backs on the problem like

everybody else. Shall we go now and have some dinner?"

45

At 1200 the next day, when Bliss was just sitting down to a solitary lunch, his phone buzzed.

"Yes?"

It was his secretary's voice. "Mr. Bliss, we have an incoming video call from the president."

"Oh, God," said Bliss. He got up and went to the desk phone, turned it on. The image of an earnest crop-haired young man appeared on the screen.

"Ah, Captain Bliss? Will you hold, please, for the president of the United States?"

"I will, yes."

Several minutes passed; then the famous features appeared on the screen.

"Captain Bliss, as you know I've been having a great many expressions of concern about your situation, and I want you to know that I'm ordering the helicopter carrier *Bluefields* to leave station and rendezvous with you sometime tomorrow. They will be searching for your missing lifeboat, and they'll be carrying a group of navy doctors and nurses, as well as a detachment of marines to keep order in Sea Venture, and you'll get every aid and assistance we can possibly give you."

"Yes, Mr. President."

"And, Captain Bliss, the *Bluefields* will also have orders to take off as many passengers as they can handle who are not affected by the disease. We'll send you a list of those passengers later today, and this is a tentative list, and you can add to it from those passengers who want to go, up to the limit of what the *Bluefields* can carry."

"Mr. President, may I ask what will be done with the passengers?"

"Yes, you certainly may, and I was coming to that. They will be kept in quarantine on the *Bluefields*, of course, until our medical people are sure everything is all right, and then they'll be taken to Guam."

"Thank you, Mr. President."

"That's all right, Captain Bliss, and if there's anything else we can do for you, I want you to call my office, night or day, at any time. Now I'm going to let you get back to your duties, Captain, and I want you to know that our prayers are going out to you."

"More trouble on the stricken Sea Venture," said the anchorperson, looking gravely at the camera. "While a helicopter carrier steams to the rescue, a famous passenger, Paul Newland, mysteriously disappears. We'll have these and other stories after this message."

That evening over dinner with Hartman, Bliss said, "I'm at my wit's end, frankly. We've tried everything

on earth, and it's all been a disaster. Now the thing's got off the lifeboat. That couldn't have happened, but it did. And the worst of it is that it's got McNulty, and Jacobs, too. Jacobs was going to build us a gadget, to spray the thing with radio frequencies and so on while it's between victims."

"Do you think it took Jacobs to keep him from making the gadget?"

"Or to make us think that was the reason. Well, mustn't be depressing. Try this claret."

Hartman took a sip, tried not to let his opinion show on his face. "Very nice."

"It's all up to me, you know," Bliss said. "I wish it had been anybody else."

"It is a bit of a quandary, isn't it?" said Hartman. "You can't let anybody off Sea Venture until you've got rid of the parasite, but on the other hand, you can't keep them here forever."

"My masters have instructed me to let a carrier take off certain selected passengers. I can't do it. If the thing once gets onto a ship that carries helicopters, there'd be no holding it."

"No, I see that. I suppose in the end it's going to come down to heroic measures. Nelson at Copenhagen, that sort of thing."

"There's the rub: I'm not a hero."

"No, well, none of us are until it comes to the point, are we?"

At 0200 that night his bedside

phone brrred. More or less awake, Bliss picked it up. "Yes?"

"Chief, sorry to disturb you, but it's collect from your wife."

"On video?"

"No."

"All right, put her on."

"Stanley?"

"Yes, dear."

"We've been so worried about you, are you all right?"

"Yes, I'm fine."

"Well, dear, I wouldn't have called at this hour, but I couldn't get through before — they kept saying all the circuits were busy."

"Yes, they probably were. Is anything wrong?"

"Well, it's nothing really, but Tommy is in a little trouble. He borrowed some money from a man at work, and then, you know, he lost the job and so of course he couldn't pay it back."

"How much money?"

"Well, they say it's three thousand pounds, and you know with the new furnace last year, and the rise in the rates, it's left us very short indeed."

"How much has he got left?"

"Well, only a few pounds. You see, he lent most of it to another man; I'm afraid it's a complicated story. But this man, the one he borrowed from, is being very nasty, calling day and night, and we really are at our wits' end, dear. I just wanted to know if there's anything you can do."

"I'll wire you the money," said Bliss.

"Thank you, dear, you are an angel. What about your epidemic, is there anything new?"

"No, it's the same."

"Well, I know you'll come through all right, dear. Oh, by the way, old Mrs. Frye particularly wanted to be remembered to you. She prays for you every night, and of course we do, too."

"Thank you."

"Well, dear, this is costing the Earth. I'll ring off now. Sleep well."

"Yes, you, too."

"And I'll give your love to Tommy, shall I?"

"Yes. Good night."

At 0800 the next morning, Bliss entered the Control Center as was his custom; Deputy Ferguson had just come on shift. A young woman named Stuart was at the communications console.

"Mr. Ferguson and Ms. Stuart, I regret to tell you that I have been ordered to do something that in my judgment would be extremely dangerous."

"Yes, Chief?" said Stuart. She was about thirty, with a stubborn Scottish face.

"A U.S. helicopter carrier is steaming toward us from Guam and will arrive at approximately 0900."

"Yes, sir."

"The carrier is to take off a number of our passengers and keep them in quarantine. I don't think they real-

ize the impossibility of doing so on a carrier, but naturally I have no choice but to comply."

"No, sir," said Stuart.

"In the circumstances, it is regrettable that you should have informed me that our communications gear is down, and that we cannot send messages."

"Sir?"

Bliss put a finger beside his nose. "Something to do with the aerial, I believe. In fact, it's quite serious, because we can receive messages on the emergency channels, and weather and navigation signals, but no other incoming messages at all — no telephone, no TV. Naturally I expect you to make repairs with all deliberate speed. Do you understand me now?"

"Oh. Yes, sir, I think I do."

"Good. And you, Mr. Ferguson?"

"Yes, Chief."

A light was blinking on the com console. Stuart flipped a switch and listened. "Chief, a message from the *Bluefields*. They say they will make rendezvous at 0913. They're asking for confirmation."

"It's a pity we can't answer, isn't it? Prepare for submersion, Mr. Ferguson."

"Yes, sir."

Sirens went off all over the open decks. Stewards hurried about stowing away loose gear and escorting passengers inside. The weather doors were shut and dogged. The fishery

and marine sections were secured. "Ready for submersion, sir," said Ferguson. Bliss did not reply.

At 0900, Stuart said, "A radio message from the *Bluefields*, sir. 'We are approaching rendezvous. Do you read? Please open telephone link.' "

"Thank you."

He turned to Ferguson. "Can you see them?"

"Yes, sir. There they are." He pointed to the TV screen.

"Bone in their teeth," remarked Bliss.

"Yes, sir."

"They must be rather irritated."

"Yes, sir."

In the screen, the carrier was now plainly visible, a hulking gray shape. Lights were winking from her foremast structure.

"She's signaling by heliograph, Chief."

"I see she is. Can you read that, Mr. Ferguson?"

"Yes, sir. 'Prepare to receive helicopter.' "

Bliss frowned. "How long is it since you learned heliograph, Mr. Ferguson?"

"Thirteen years, Chief."

"So you're bound to be a little rusty. You're really just guessing at the message, aren't you?"

"If you say so, Chief."

"I do say so. In fact, we don't know that's a U.S. Navy vessel at all. It could be hostile. I think we must consider evasive action, Mr. Ferguson."

They watched in silence as the carrier rapidly drew nearer. It hove to half a mile away; there were further signals. They they saw a helicopter lift off the deck and swing toward them.

"Down to plus ten," said Bliss, "smartly, Mr. Ferguson."

"Yes, sir."

The water rose until only ten feet of Sea Venture's upper works stood above the surface. The copter was still droning toward them. In the view from the camera on the foretop, they saw it fly over, vastly foreshortened; it reappeared, circled twice, and turned back to the carrier.

"There'll be hell to pay for this later," Ferguson remarked.

"I know it," said Bliss. In the old days on the *Queen*, a first officer would not have spoken to his captain in quite that way, but Bliss wasn't a captain and this wasn't a ship.

47

On the bridge of the *Bluefields*, Commander Leonard W. Markey watched in the television screens as the copter turned back from the submerging vessel. Beside him was the executive officer, Glenn Pugliese. The speaker crackled: "Returning to ship." "Roger."

"What the hell do they think they're up to?" Markey said.

Pugliese, who knew his captain, did not reply.

"Send the pilot up for debriefing as soon as he gets here. No, belay that. Hell! I'm going to my cabin."

Bliss waited half an hour and then gave the orders to surface. Presently the helicopter circled, dropped something, and went back to the carrier. "What is that?" said Bliss.

"Dye marker," Ferguson replied.

"Oh, I see. Well. That's a pity."

Twice more they surfaced, and the copter came over, and twice more they submerged. Bliss could imagine the messages flying back and forth between here and Washington.

The yellow stain spread out around them; gradually they left it behind. In the late afternoon the copter came over again and renewed it. After dinner, which he ate in blessed tranquility, Bliss came back to the Control Center. Deputy Davis was on duty. The stars were bright over the ocean.

"Submerge to three hundred, Mr. Davis," he said.

"Three hundred, sir." The cub gave him a worshipful look.

"Keep her there until 2000 tomorrow. Log it."

"Yes, sir."

And now he was counting boxes in a storeroom — good Lord, when was that? — '79 or '80, probably, his freshman year in college, a summer job, pure monotony. But the boxes were absolutely real now, he could

even read the printing on the brown cardboard: "TEKTRONIX Decoupler, Model 105, 4920-29." He hadn't thought of that in years, and certainly hadn't remember the lettering on the boxes, but he knew it was right. He could see his own hand with the pencil, and the clipboard, and he could see the dust motes swimming in the sunlight from the one high window....

Now the bright sparks were streaming past him, not dust motes anymore, and there was a wet smell in his nostrils, a clean cold under-water smell as familiar as bacon and eggs, and he felt his jaws snap as something came by. And now a fish swam up to him in the water that was colorless and pure as air; its scales were like multicolored armor, and it turned to look at him with one round idiot eye, then flicked away and swam to the other end of the tank.

Newland woke without knowing that he had been asleep. His body hurt all over. It was dark outside; he was very thirsty. He managed to get out of the pilot's seat and into his wheelchair; he drove it back down the aisle, found a water fountain, and drank. He thought that he probably ought to eat something. He could see the food storage lockers over the microwave ovens, but they were out of his reach.

. . .

Commander Leonard W. Markey was a stocky blond man. His eyes were pale blue, his eyelashes were almost white, and his skin so fair that it burned and peeled. He would have been well suited to North Atlantic or Arctic duty, and therefore, as a matter of habit and tradition, the navy had assigned him to the Asiatic Fleet.

Markey had graduated from Annapolis seventeen years before, standing 141st in his class. At the age of 39, he knew he had been a little too long in grade, and could not look forward to further advancement unless there was a shooting war, an eventuality for which, as a sensible man, he had no yearning. He considered himself a good officer; in maneuvers last spring, *Bluefields* had scored the 2nd-highest marks of any helicopter carrier in the fleet. On the whole, he was satisfied with his life and his career; he looked forward to another few years of undistinguished service, then retirement with his wife and children on Oahu.

His present mission had started out as something just unusual enough to be interesting, but certainly not much of a challenge. The search for the missing lifeboat was routine; the recon helicopters came back every day with nothing to report, and that was not surprising: if the lifeboat was under power, it could be anywhere in a thousand-mile radius by now.

That was not really his problem — other ships and planes out of Guam were looking for the lifeboat, and eventually one of them would find it. Meanwhile, rescuing the VIP passengers from Sea Venture was his problem.

At first he had not been able to believe that CV's behavior was anything but some kind of dumb mistake, but now he was beginning to see the matter differently. This was not an aid-to-civilians mission, like ferrying Roosevelt's dog home from Yalta during World War II; he was fighting a naval engagement against an opponent who was making a jack-ass out of him.

The problem was that he couldn't land a copter on CV's deck, because every time he tried, the damn thing submerged. With helicopter reconnaissance, he could locate it every time it surfaced, but he couldn't fire a shot, couldn't drop depth charges, couldn't do anything that might injure civilians; and if the copter approached, down CV went again.

There had to be a solution. There was; Markey had found it, and he felt pleased with himself.

For the time being, Bliss had decided, the best thing would be to run partly submerged at night, when the chances of being sighted were almost nil, and surface in daylight. There was no way to escape the carrier except by running fully submerged indefinitely,

and he couldn't do that because the air-purifying chemicals wouldn't hold out forever. Food was going to be a problem, too; their supplies were meant to last only until they reached Manila.

When he entered the Control Center at 0800 on Thursday, the sun was well up in a partly overcast sky. He said good morning to Ferguson and Stuart, looked at the log, then the barometer. "No sign of our friends yet?" he asked.

"Not yet. Woop, excuse me, I think I see them."

In the foretop monitor, a dark shape was rising and dipping near the horizon. "Yes, there they are," said Bliss. "Everything's secured?"

"Yes, sir, as you ordered."

"Any complaints from the passengers?"

"Oh, yes."

The four frogmen were mustering on the flight deck. In the bridge monitors, Markey watched them climb into the copter carrying their gear. The door closed.

"Charlie Hatrack Four Niner, you are cleared for takeoff," said the speaker.

"Roger."

After a moment the two sets of blades began to turn; the ungainly machine rose from the deck, hovered, swiveled in midair, and tilted off toward Sea Venture.

. . .

"Down to plus ten, Mr. Ferguson."

"Yes, sir."

The water rose over one deck after another. The copter made a pass overhead, swung back; then a series of dark shapes dropped from it into the water.

"What was that?" said Bliss sharply.

"Frogmen, sir. Four of them."

"No, I meant that other thing — what was it, a raft?"

"Looked like one, sir."

"What are they up to?" Bliss muttered, and gnawed a thumbnail. "Raft — they'll tie onto us— Oh, God! Surface, Mr. Ferguson, smartly!"

"Sir? Yes, sir." Ferguson touched the controls. In the lookout screen they saw the water receding; then the Signal Deck broke the surface, and as the lenses cleared they could see white water boiling across the deck. Four struggling figures were washed over the side.

"Plus ten, Mr. Ferguson. Where's the copter?"

"There, sir." The helicopter swooped overhead, descended to port, came back again.

In the screens now they could see the raft, and four dark heads bobbing in the swell a few yards off the port quarter. The frogmen and their raft were slowly falling astern. The copter circled again. Presently it hovered and lowered a sling. They watched as one frogman after another was hoisted into the copter. They left the raft behind. The copter drift-

ed away toward the carrier.

Ferguson was clearly puzzled. "Chief, if you don't mind my asking—"

"They were going to tie onto us with a long line. We'd tow them, wherever we went. Then the next time we surfaced, they'd be there. That would be the end."

"Yes, sir." Ferguson's eyes were bright.

Bliss turned away. He was not proud of himself, and the admiring looks of his deputies merely made him feel like an imposter. This was not his line at all, this Hornblower kind of daredeviltry. Something Hartman had said, talking of Nelson, had put it into his head — Nelson at the Battle of Copenhagen, putting the spyglass to his blind eye and remarking that he couldn't read the signals. That was all right for Nelson, but not for him. Nelson had been made a viscount afterward; Bliss was simply going to lose his job, and perhaps his life.

When the copter returned with its crestfallen crew, Markey said to his executive officer, "God damn it, who is that guy, anyway?"

"Civilian, I think. Maybe he was in the merchant marine before."

"Well, where did he get that cocked hat?" Markey sat down at the chart table. "Do you realize I've got to signal CINCAF and tell them we've blown it again?"

"They can't get away with this forever."

"Well, what's going to stop them?" Markey looked gloomily at the table. "Get San Francisco on the phone. Tell them I want a complete set of plans for Sea Venture, right down to the nuts and bolts. This is going to be a dirtier job than I thought."

49

After a delay of twenty-four hours, the Sea Venture plans began scrolling out of the fax machine. They made a stack more than a foot high. Markey turned them over to his engineering officer, Ed Jensen, and said, "Find something."

After dinner Jensen came to him with a printout in his hand.

"Here's what we want. We know one of their lifeboats is gone — that means there's an empty launching tube." He pointed to the diagram. "This passage is closed by the door of the lifeboat itself when it's in the tube. Back here is a watertight door. Get in there, wedge that door open, and then they *can't* submerge. If we take them by surprise, we walk into the bridge, what they call the Control Center, and that's all she wrote."

"Pretty slick," said Markey. "Yes, that might just work."

Lieutenant Avery N. Hamling, Jr., was forty-seven years old, and still the strongest diver in his group. His

father, a navy commander and a fine swimmer, had taught him from the age of four how to push himself to his limits, and the Special Underwater Section had given him the opportunity to do so. Hamling kept himself fit, and kept his men fit, ready at any time for the most hazardous and demanding duty in the navy.

He found Markey, Pugliese, and Jensen in the conference room. "You sent for me, Captain?"

"That's right. Sit down, Hamling, and I'll fill you in. Show him those printouts, Ed."

Jensen passed a sheaf of papers across the table. "Here's a plan and elevation of one of Sea Venture's lifeboat tubes. As you can see, it's a cylinder fourteen and a half feet across by thirteen and a half deep. Here's the passenger entrance, twenty feet back from the mouth of the tube. It leads to a passage eight feet long with a watertight door at the end. That's where we want you to in."

Hamling studied the diagram. "The door can be opened manually from the tube side?"

"Yes." Jensen passed him another diagram. Hamling glanced at it, then returned his attention to the tube plan. "Where's the waterline?" he asked.

"Here, right at the bottom of the tube."

"And there are no handholds — nothing to grip."

"Not in the tube. We think there

are handrails in the passage. Unfortunately they don't show on these plans. They've got to be there, but we can't tell you how close they run to the doorway."

Hamling stared at the diagrams, trying to translate them into an image. "Which way does the lifeboat door open?" he asked.

"Good question," said Markey, lifting his eyebrow. "Where are those plans, Ed?"

"Wait a minute." Jensen got the stack of printouts, shuffled through them. "Here we are." He pushed across a plan and elevation of the lifeboat. "The door opens inboard into the passage, and the hinge is on the left as you face the tube."

Hamling nodded. "All right, so if there is a handrail, it'll be on the right side. Next question: Is this tube port or starboard?"

"Starboard," said Markey. He picked a photograph out of the pile of papers and showed it to Hamling. "Copter got this with a telephoto lens — you can see the empty tube right here."

Hamling examined the photograph. "When was this taken?"

"This morning."

"Looks like the swells are coming in from her starboard quarter. Every time one of those swells hits the tube, there's going to be a hell of a surge. What are the chances the weather will be calmer in a day or two?"

"Zero," said Markey. "Typhoon

Tony is due to pass over us two days from now."

They were silent for a moment. "If it were up to me," Markey went on, "I'd wait for decent weather. But there are civilians on board with urgent appointments. CINCAF wants us to get them off right now, if not sooner."

"When do you want us to go?"

"Oh four hundred tomorrow."

Hamling was silent for a minute. "We can do it."

"Sure?" asked Markey.

"Yes."

"All right, now here's the other part of the problem. We can't get near Sea Venture in daylight, and we don't dare used a minisub — they might be listening for motors. The best we can do is drop you before dawn, as near as we can get to the position where Sea Venture ought to be when she surfaces. That's going to be partly guesswork. How close do you want to be to make that swim underwater?"

"Anything up to five miles would be good."

"All right, that we can do. If we don't, though, your men are going to have to stay in the water, holding onto the raft, until we can pick you up after nightfall. It'll be a long day."

"I understand."

50

I n the cone of yellow light from the helicopter, all they could see was

the raft bobbing on the swells and the gray water around it: the rest of the world was empty black. They swam to the raft and climbed in; already the copter was rising. The light blinked out, the blackness pressed closer.

As the dawn light spread over the silvery wrinkled sky, Hamling stood up on the pitching raft, supported by Martinez and Orr, and began to scan the ocean with his binoculars. For a long time nothing happened.

"There it is." The upper works of Sea Venture were thrusting above the horizon.

"How far?"

"Wait a while — she isn't all the way up yet." Hamling watched, and finally said, "Five miles, maybe six." He lowered the binoculars and tucked them into his belt pouch. "You want to swim a little, or would you rather hang around all day to be picked up?"

The men helped each other on with their liquid-air tanks, checked regulators, rubbed the compound on their faceplates. Orr and Martinez opened the valves of the flotation cells. As the raft sank, the five men slipped into the water.

After the fourth hour, Hamling surfaced long enough to catch a glimpse of Sea Venture and adjust the lubber line on his compass; then they went down again to five feet. An hour later the hull of Sea Venture loomed ahead of them. They swam toward the stern.

Hamling surfaced once more and peered at the black opening just above the waterline.

As each swell struck, the gray water foamed into the tube. He timed the surges: each one took six seconds, and the tube was barely emptied before the next one went in.

He tried to visualize what was happening inside the tube. The water hurtled in at an angle, slapped the forward side, filled the open passenger entrance, then rebounded from the back of the tube and washed out again. The direction of the surge was in their favor, but the water was going in at roller-coaster speed. Unless position and timing were exactly right, a man would come back out with broken limbs or a concussion. It had to be done right, and it had to be the first time.

Hamling uncoiled a line from his waist and handed the end of it to Martinez, signaling the others to link up. He turned on his back and swam close to the hull. Overhead he could see the pearl-gray lines of the troughs going it. He let himself become part of the rhythm. He visualized himself rising, catching the surge. He did not think of failure.

He counted seconds, then turned onto his side and propelled himself upward with three powerful strokes. He felt himself hurtling inward: in the blinding smother, he reached out, caught the smooth rail just where it ought to be, and hung on with all his

strength as the backwash tried to suck him out again. Gasping and triumphant, he pulled himself into the passenger corridor and tied his line to the handrail. When the next surge went out, he tugged on the line. After a moment he felt it go slack, and pulled it in hand over hand as fast as he could. Martinez, with his face mask knocked awry, came in over the sill.

When they were all inside, Hamling waded to the watertight door at the end of the passage. The stainless steel control wheel was in the center of the door. He turned it counter-clockwise. It was frozen at first, then it gave. He pushed it open. While the rest of them got out of their gear, Martinez took a rubber wedge from his kit and drove it under the door with blows of a mallet. He tested the wedge with his hand and held up thumb and forefinger in an "O.K." sign.

51

At 1200, when the shift changed, Bliss dropped in at the Control Center for a look around before lunch. Ferguson was just being relieved by Deputy Womack, a fair-haired young man from California; the new com officer was Peter Gann. At 1215 Bliss was on the point of leaving when Womack sat up straight and said, "Chief, you're not going to believe this, but we've got another lifeboat door signal. It's the same one as before — Lifeboat 53."

Bliss said nothing. Now what? Could somebody have got out through the empty tube? What would be the point of that? Or — oh, God, — could somebody have got in? "See if you can shut the door," he said.

Womack shook his head. "It's still telling me the door is open. Maybe just a malfunction?"

"No. It isn't. Try opening the door, then closing it."

"I'm getting a status signal — door opening."

"Close it."

"Door closing." After a moment Womack turned. "Still the same signal — it isn't shut."

Bliss looked at the clock. How long had it been since the signal had come on? Five seconds, ten? If they were really there, what were they doing now?

Under their wet suits, the five men were dressed in white skivvies and shorts. They took navy Colts from their pouches and belted them on. Martinez stood guard at the entrance to the lifeboat bay; the rest, with Hamling in the lead, set off up the corridor at a trot.

"Down to plus 117, Mr. Womack."

"Plus 117? Yes, sir." After a moment he said, "Chief? If that door's really open, we'll flood the Boat Deck."

"I know," said Bliss.

. . .

When the next surge came, an inch of water flooded into the lifeboat bay where Martinez was standing. Instead of washing out again, the water rose. Suddenly there a clangor of alarm bells. Martinez saw the watertight door descending just in time to grab an air bottle and shove it underneath.

In the corridor, the fluorescents abruptly went out, replaced by the sullen yellow glow of emergency lights. Life rafts dropped from the ceiling and swung at the ends of their cords.

Ahead of the four frogmen, a watertight door was descending. Hamling broke into a splashing run toward it, but he was too late. The flood reached the closed door and kept on rising.

"Let me sit here, if you don't mind, Mr. Womack," said Bliss. "You and Mr. Gann watch the foretop screens, please." Bliss sat down at the console and called up a Boat Deck status display. Watertight doors were down at both ends of Corridor Z where it intersected with cross corridors, but the door at the entrance of the lifeboat bay was not closed. A real malfunction, this time, or had they jammed it with something? The water level in the corridor was just over two feet.

"Copter in sight, Chief," said Womack suddenly.

Bliss felt a sudden paradoxical re-

lief. That meant, at least, that he had not made a grotesque misjudgment.

Submerged, Sea Venture was like a whale, a shape as portly and to all appearance ungraceful as Bliss himself. Only Bliss, perhaps, fully realized how delicately trimmed she was, how easy to make her dance.

He did a mental sum. The isolated section of the corridor was 80 feet long and 10 feet wide, ergo 800 square feet, times 2 made 1,600 cubic feet. That was about 100,000 pounds of water — 50 tons. Was that enough? Probably, but he wanted to take no chances. Bliss reached out and turned the depth control to plus 126. Sea Venture descended gently another foot. Now the sensors showed 3 feet of water in the corridor.

He glanced up at the monitors. The little speck of the helicopter was plainly visible.

Bliss overrode the interlock and began to pump water out of the port side trim tanks. He watched the clinometer, feeling the vessel tilt almost imperceptibly under him. One degree; two. It couldn't be much more, or he'd be having a lot of old people falling over and breaking their hips. He adjusted the depth control again to positive 129. Sea Venture began to rise.

Womack said, "Chief, the helicopter—!"

Bliss glanced at the monitor. It was close, but there was still time. "We must rise before we can de-

scend," he said. In the Boat Deck screens, he could see a torrent of water pouring into the ocean. The green light on the panel that indicated the lifeboat bay door turned abruptly red. The obstruction must have been swept away. Instantly Bliss typed in another override and raised all the watertight doors. The torrent continued. In the screens Bliss saw five men struggling in the water. When the rush of water stopped he lowered the doors again and turned the depth control to plus ten.

Sea Venture gently slipped under the surface, all but its upper works, as the helicopter soared closer. A few minutes later Bliss had the satisfaction of seeing the copter lower a sling to pick up the frogmen.

52

Early in the morning the hospital annex called and told Bliss that Dr. McNulty had awakened. Bliss went down an hour later and found him looking weak and bewildered. "How do you feel, Doctor?"

"Got a sore nose," said McNulty. "Now I know what it feels like. I was dreaming. I dreamed—" He closed his eyes.

Later in the day Bliss dropped in again; McNulty was looking more alert.

"Doctor, we've missed you badly. While you were ill, we've been playing cat and mouse with a helicopter

carrier — they want to take off our Very Important Passengers."

"They can't do that."

"I know, and I've been able to stave them off so far, but it can't go on forever. Our only chance is to get rid of the parasite somehow in the next few days. If anything at all occurs to you—"

McNulty shook his head. His eyes filled with tears; Bliss, embarrassed, went away.

Paul Newland realized that his deliverance was not far off. He was very weak now, and he slid down into a fuzzy half-consciousness every now and then, but in the intervals his mind seemed clear enough. He had written a note to Hal, and another one to Olivia Jessup, L-5 managing director. He had gone over his life in memory, as drowning people were supposed to do, and had made his peace with it. There were things he had done that he might do otherwise now if he had the opportunity, but they had been the best things he knew how to do at the time.

It really was quite easy to die; he would have preferred not to do it all by himself, perhaps, but that was a minor complaint. He did not expect anything afterward: he believed that his personality was a unique set of wave forms that, after the dissolution of his brain, would fade into the background noise of the universe. He was grateful to have had the use of this

body and this mind for sixty-four years; he had realized long ago that he did not want it forever.

He was quite sure now that John Stevens must have put him into the lifeboat, perhaps on orders from Bronson's group. He felt no vindictiveness, only a kind of melancholy regret. The world was going to turn without him. Probably Sea Venture would not survive; perhaps the L-5 program would. Was that a good thing or not? He no longer knew.

He awoke from one of his periods of half-consciousness, and knew that the time had come. I'm not sorry for anything, he thought, and drifted away into the long dark.

By midafternoon, heavy swells were overtaking Sea Venture from the east; the barometer was falling. At 1700, Bliss ordered the upper decks cleared, and Sea Venture submerged to fifty feet.

Hartman was standing with Bliss and Deputy Davis in the Control Center after dinner. He could feel a faint but perceptible rise and fall of the deck under his feet.

"Why this particular depth, if you don't mind my asking?"

"Navigational problems," Bliss said. "We could easily get a smoother ride by going a bit deeper, but the deeper we go, the more nothing, and we're already far north of where we ought to be. Excuse us a moment, Davis."

"Yes, sir." The deputy stepped aside.

"Here we are," said Bliss, pointing to the red dot in the center of the display. He pushed a button. "Here's our projected course for the next twenty-four hours. As you see, we're going to pass between Rota and Tinian, and that's bad enough, but farther north the currents are a nightmare, and there's a risk of being carried into a sort of mini-gyre south of Kyushu."

"That's the drawback of steering by currents, then, isn't it?"

"Quite right, and it would be much safer to cruise these waters in the summer, but then we wouldn't get the tourist trade, so there you are."

"Well, the carrier will never find us in this weather, at least. That's something."

"Yes," said Bliss gloomily.

He played a game with Hartman and went to bed, but did not sleep; he lay and watched the illuminated inertial-guidance repeater opposite his bed. After an hour and a half, the motion of the vessel was much worse. He picked up the phone.

"Control Center."

"Womack, take her down to seventy feet."

"Yes, sir."

Presently the motion moderated again. For there to be any at all at this depth, the waves at the surface must be a hundred feet tall. Bliss wondered

where the carrier was, and if it had managed to get out of the storm path.

Down here they were blind and deaf; the inertial guidance was all they had. Up there it was a nightmare of wind and wave.

Bliss was aware that he had done all that a man could, and more than he had expected of himself. And it was all for nothing, because he couldn't isolate the parasite and he couldn't kill it. For a long time he had clung to the unreasonable hope that Dr. McNulty would think of something when he recovered. Now he could not deceive himself any longer. In another twenty hours his supply of chemicals would run out, and he would be unable to submerge; then the helicopter would land and take the passengers off: mate in one.

At 0500 he got up, shaved and dressed, and went to the Control Center. He spoke to the security guards at the door, crossed the anteroom, and went in.

"That's all right, Davis, you're relieved. Go and get some sleep, or whatever you like."

"Sir?"

"I said you're relieved. Go home; that's an order."

The young man stood up slowly and left the room. Bliss went and tapped the communications man on the shoulder; he looked up, raising the earphones. "You're relieved," Bliss said. "Go on, get out."

When they were both gone, Bliss

locked the door and sat down for the last time in the command chair.

Never in his professional career had he had to make a decision like this. It was not his style at all; he was an administrator, not one of your Yankee skippers quelling mutinies with a marlinespike or bringing his ship through a gale around Cape Horn. But he was square against it now: there were no longer two choices, only one.

He looked at the inertial guidance display on the console. Their position was a little more than three miles due east of Rota. He waited and watched the chronometer, then pressed the buttons to bring Sea Venture to the surface.

Great tub that she was, she would break up like a house of cards if he ran her ashore in this weather. He had a glimpse of bulkheads collapsing, water rushing down the corridors like a gray fist.

As he waited, he felt a vague dissatisfaction, a feeling of something unfinished. It was too bad about the radio; he would have liked to try to get a call through to his wife, just to say good-bye.

53

As the great vessel rose, waves fell over her like mountains. She dipped and shuddered, and her massive fabric groaned. Cups fell off tables, then vases from stands. Throughout Sea

Venture, people sat up in bed, gasped questions at each other. The motion of the vessel around them was like a betrayal, like an earthquake. The sounds were like nothing they had ever heard. Then the loudspeakers in the corridors came to life.

"Ladies and gentlemen, this is Chief Bliss. We are experiencing some turbulence as a result of surfacing to avoid a submerged obstacle. We will be descending to a safe depth shortly. There is no cause for alarm, and the lifeboats will not be used. I repeat, the lifeboats will not be used, Thank you and good night."

Malcolm got up and began to dress.

"What are you doing?" she asked.

"If I have to drown, I don't want to do it in bed."

After a moment she laughed. "Come here a minute first," she said. "You know, I never realized before how much I love you."

Emily and Jim sat looking at each other. Jim's face was pale; there were beads of sweat on his forehead. "Em," he said, "I'm sorry, you know — for everything."

"You don't have to be sorry," she said. "Maybe—"

"What?"

"Maybe this is a good time to forgive each other."

McNulty woke up with a feeling of

panic. At first he did not know where he was. The room was dark except for a night-light; the bed was lurching under him, and a deep tortured sound came from the walls.

He got up, stumbled to the light switch, and found his pants in the closet. In the corridor he met Hal Winter, his head still bandaged. "Dr. McNulty, what's happening?"

"Don't know," said McNulty. "Get me a chair, will you — I'm not sure I can walk."

Winter brought a powered wheelchair and helped him into it. "Where are you going?"

"Control."

"I'm coming with you."

In the anteroom they found two deputies, Ferguson and Davis; Walter Taggart, the head of engineering; several security guards; and a swarm of other people. Ben Higpen, Yetta Bernstein, and Captain Hartman entered a few moments later.

Ferguson was talking on a telephone. After a moment he put it down and turned to McNulty. "He won't listen," he said.

"Who?"

"The chief. He's in there with the doors locked."

"Let me talk to him."

Ferguson got up and moved his chair to make room. "Just press the button — I've got the speaker on."

McNulty rolled his wheelchair up. "Chief, this is McNulty. Mind telling

me what you're up to?"

"I'm sorry about this, Doctor," said a voice, "But there's no other way to do it. If we keep on, they'll float us, or disable us, and take the passengers off. We haven't a prayer of getting rid of that thing: you know it and I know it. The only way is to take it to the bottom with us. I'm really sorry. Please tell the others not to try to break in; I'm armed, and I'll shoot if they do."

At Ferguson's gesture, McNulty turned off the phone. The deputy said, "Mr. Taggart, can you come down into the controls and cut them?"

"Not in time to do any good. I'd say force the door and take our chances. He may be bluffing about the gun."

"What if he isn't? Suppose he fires a couple of shots into the control panel?" Ferguson turned on the phone again. "Chief, we'd appreciate a chance to talk about this. Will you open the door, please?"

"Not likely. You know I'm right, all of you."

McNulty put his head in his hands. "He is right," he muttered. Watery images were going through his head: the cold, and the fish lips nuzzling against his dead face....

Suddenly he sat up. "Oh, God," he said. "The fish!"

"Take it easy, Doctor," said Ferguson, and put his hand on his shoulder.

"No, no, you don't understand—

Let me talk to him." He grabbed the phone and said, "Mr. Bliss, there's something you don't know."

"There's a great deal I don't know, but I expect I'll find out shortly."

McNulty kept talking. "You remember, after Randy Geller collapsed, there was a three-hour period before the next person felt faint?"

There was a pause. "No, I don't recall. What about it?"

"He was found beside the aquarium in the marine lab. The fish, you don't understand — the fish!"

There was a silence. "Are you suggesting—?"

"That's where it spent those three hours, it's got to be. It doesn't have to live in human beings. If you sink us, you won't be killing the thing, you'll be letting it loose."

After a long pause, Bliss's voice said, "Descending to one hundred feet."

Slowly the motion of the vessel steadied; the groaning died away. The door opened and Bliss emerged. His face was pale, his eyes red-rimmed. "Mr. Ferguson, take over," he said.

"Yes, sir." Ferguson passed him with a sympathetic look, as if he wanted to say more but could not find the words. The com person followed him in.

Bliss sat down heavily and put his head between his knees. "I'm sorry," he said. "I've made a mess of it. I knew

I would." He looked at McNulty. "We're done for, aren't we? There's no way to get rid of the thing."

McNulty felt that it was an intolerable effort to speak. "This man needs to lie down awhile, and so do I," he said. He turned to the nearest face. "Will you call the annex and get somebody to give him a Dalmane?"

After that, someone trundled him into the elevator and back down to the hospital bed, and in no time at all he was awake again. Janice was saying, "Doctor, how about a little breakfast?" The idea disgusted him, but he drank the orange juice, managed to get down a few spoonfuls of oatmeal. Janice started to help him to the bathroom, but "I can walk," he said gruffly, and he could.

"Any more patients?" he asked when he got back.

"Two last night, a broken leg and a heart attack."

"Where are they?"

"Down the hall, but you're not going there. The heart patient is recovering; I set the leg and it's O.K. You're a patient, Doctor, and everything is under control."

McNulty wished it were true. "How is Bliss?" he asked.

"All right. He called this morning to see how *you* were." She went away. A few minutes later she was back, followed by Higpen and Bernstein. "Ten minutes," Janice said firmly, and disappeared again.

Higpen looked as if he had not

slept, and so did Bernstein. "Doctor," she said, "we want to talk to you about an idea, if you're feeling strong enough."

"Sure," said McNulty.

"Maybe you remember I said this before. There is a way to get rid of this thing, if one of us is willing to die."

McNulty started to shake his head.

"I'm not talking murder, I'm talking about somebody to be a sacrifice, a scapegoat. Suppose we get a few people to agree. There wouldn't have to be many. We'd go wherever the last victim collapsed and stay there until the parasite takes one of us."

"And then what?" McNulty asked.

"Get a crate ready. A metal crate, ten feet on a side. The person, whoever it is, gets into the crate and you give them an injection."

"I won't—" McNulty started to say.

"Wait a minute, let me finish. We put some kind of framework inside the crate to hold the person in the middle. And then we lower the crate to the bottom of the ocean. The person dies painlessly; the parasite can't get out, and the fish can't get in. Now tell me what's wrong with it."

"It won't *work*," said McNulty wearily. "If these folks know what they're going to do, the parasite will know, too, and it'll get away like it did before."

"Could you hypnotize them, so they wouldn't know?"

"Are you kidding?"

Bernstein took a deep breath. Her eyes filled suddenly, and tears began to trickle down her cheeks. "Well, if we have to kill somebody who *isn't* a volunteer—" she said a tight, high voice.

"Scapegoat," said Higpen suddenly. "Yetta, remember the goat in the King Neptune ceremony?"

"Sure I do. What about it?"

"Dressed in a suit, riding in a cart? What if we could get the thing to go into a *goat*?"

They looked at each other, then at McNulty. "Might work," he said, and felt a trickle of excitement. "The thing has never seen a goat, is that right?"

"Yes, because we kept it out of perm. Do you think, if we dressed it up in a suit again—?"

"My gosh, I just remember something," McNulty sat up straight. "When this thing first started, we were getting a run of patients that looked unusual in some way — dress, or skin color. That might have been just because the thing noticed the difference, and it was *curious*."

After a moment Bernstein said, "Come on." Her jaw was set. Higpen followed her out the door.

They went to look at the goats, then talked to Miriam Schofelt, who had been the chairperson of the King Neptune committee this year. She still had the suit they had used, a paper one made by Mrs. Orumat — jacket,

collar, and tie all in one piece. Then they called Dan Taggart in engineering and explained what they wanted.

"I don't know about a metal crate," Taggart said. "Even aluminum, that'll corrode away after a while. I'd say the best thing would be to use a wooden crate and fill it with concrete, if we had any."

"I've got about a hundred bags of mix in the store," Higpen said. "Is that enough?"

"Guess so. What mix?"

"Some of it's one-two-four, some one-one-two."

"Sounds good to me. How big a crate, did you say?"

54

Down at the end of the lobby, people were gathering around someone who had just come in. Curious, she went that way. The watcher inside her was intrigued to notice that the center of the crowd was a black-and-white goat, dressed in a gray suit and tie, sitting in a cart. It was clear from her host's reactions that this was an amusing sight, but she was not quite sure why. The relationships between human beings and the other species on their planet was something she had never clearly understood. The goat was considered an inferior animal, but if this one was dressed like a human, did that imply that some goats had a higher status?

As soon as she was near enough,

she slipped out, across the fuzzy void, and in again, feeling the alien body slump as she entered. She had just time to realize that the goat was indeed a lower animal, without speech or reasoning, before the needle entered her neck.

They carried the limp body into the fishery section, where the crate was ready. The crate was partly filled with concrete; they lowered the goat into it and then poured more concrete and bolted on the top. The hoist took it out over the surging green water, lowered and released it. The crate sank and was gone, on its way to the bottom. The horror went with it.

Both windstacks had been carried away in the storm, and there was other damage abovedecks; the radar dishes and antennas were gone, screens and railings broken. Sea Venture could not signal, but she floated, and at last the helicopter touched down on the landing area. Bliss was there to meet the marines when they emerged with drawn pistols.

"This won't be necessary, gentlemen," he said. "Our resistance is over; you're free to come aboard."

"Who are you?" the marine officer demanded.

"I'm Stanley Bliss, the control chief."

"My orders are to place you under arrest until the vessel is secured, Mr.

Bliss. Will you go ahead of us, please?"

"Certainly."

McNulty had been watching himself with clinical attention, waiting for alterations in his outlook, and he thought he had found some. It was a little as if all the things that were important to him were weighted parts in a Rube Goldberg machine, and the weights had shifted silently and smoothly to new positions. They were all still there, but their relationships were different. His view of the universe seemed perfectly coherent, and he was comfortable with it; in fact, it seemed to him that he was viewing things more sensibly and rationally than he had before. It was funny to be seeing the situation from the inside, and even funnier that it didn't seem to make any difference that he had been expecting it.

To begin with, he was not sorry that he was a doctor, and he meant to continue in the practice of his profession if he could get away with it, but he didn't feel the same way about the rules and conventions. He had a feeling that he had been doing a lot of things just to touch base or protect himself against malpractice suits, not especially for the benefit of the patient, and not doing some other things that might have been helpful. He was discovering in himself a sudden curiosity about herbal cures, for example,

and psychosomatic stuff that he had dismissed as pseudoscience. Maybe it was pseudoscience, but did that matter, if it worked?

After consultation with the carrier, it was decided that two hundred passengers would be taken off now, the rest later when *Bluefields* was joined by two more carriers. Sea Venture, now far off her course, would be assisted by tugs to reach Manila. After that, Bliss was not sure what would happen. Probably they would try to fit new windstacks there in order to get the vessel back to her home port in San Francisco, but Colford did not seem to be sure. It was doubtful that Sea Venture would ever cruise again; the best thing might be to break her up for scrap.

As for himself, he was more or less scrap, too. He might have to face criminal charges in the States, and there would certainly be civil suits as well. If he got through all that, it was still doubtful that Cunard would take him back. He could perhaps get a job managing a hotel inland somewhere. That would suit him very well.

On their last night together, Bliss, Bernstein, Higpen, Hartman, Winter, and McNulty had a late dinner. "I must say I'm proud of the lot of you," said Hartman. "If there's any justice, you'll all go down in the history books. Even if not, you'll all have the satisfaction of knowing you've met

and defeated the greatest threat humanity had faced in a hundred thousand years." He raised his glass. "Here's to you. May you all live and prosper."

"Now I suppose we'll never know what might have happened, if it had gone the other way," said Winter. "It's a shame we didn't find out more when we had the opportunity."

"Such as?"

"Oh, well, for instance — how does the thing reproduce?"

McNulty looked startled. "Good question. Maybe it's just as well none of the passengers were pregnant."

About twelve hundred of the passengers were taken off by helicopter, over a three-day period, and transported after further delays to Guam; the rest elected to stay with Sea Venture to Manila. The vessel seemed emptier and older than she was; there was a curious sense of decayed majesty in her lobbies and corridors, as if she were an ancient hotel about to be torn down. Some of the passengers became quite sentimental in their loyalty, and spoke with scorn of those who had "left the sinking ship."

Tugs warped the battered hull into Manila harbor on a May afternoon. The sky was cloudless, the air hot and moist. Jim and Emily Woodruff went down the ramp together, her hand tucked into his arm. "It'll be good to get home," Jim said.

"Yes." Her expression was calm as

she looked out over the sprawling city. Jim was getting used to that. "Feeling O.K.?" he asked.

"Yes, Jim." And she pressed his arm, gently, as if to reassure him.

Captain Hartman, smoking his pipe, boarded the ramp with a twinge of regret. It was not an experience he wanted to repeat, but, after all, it was something to tell the grandchildren about: a real sea adventure. He and Bliss had exchanged promises to meet. Perhaps they would, someday, and reminisce over their pints like two old seafaring men.

Julie Prescott boarded the ramp with her parents. Stevens was a little

ahead of them; they had said their good-byes. Stevens was going to fly to Switzerland; they had arranged to meet in New York in April. "When I come back, you must not mind if I have another name," he said.

Feeling a little dizzy, she thought of something she had not told Stevens about: the circled date on her calendar, two weeks ago. She had never been this late before. She still was not sure how she felt about that, or about Stevens. Was there anything ahead for them?

Well, she thought, they would all have to wait and see.

(from page 91)

candy counter; elegant *merde* shot with state of the art SFX on the new ultrafast Kodak 5293 film. Only that which is conceived as intended for a less discriminating audience would *dare* to be palmed off as unworthy of complaint on the same level as that directed toward "real" movies, "serious" movies, "important" movies.

The excuse that we weren't supposed to be bothered by meanspirit-*edness* in *Gremlins*, the brutality toward children in *Temple of Doom*, the violence and emptyheadedness blown on a breeze of rock'n'roll in *Streets of Fire*, the plot silliness of

Cloak and Dagger because they are just "cartoons" intended for a malleable, substandard intelligence audience that will settle for zooming rock-*etships* and flashing light-shows, is a reflection of the deepest-held views of those who run the film industry.

And as long as they can make a buck or five or ten from such a gullible audience, we can stop asking *Why doesn't Hollywood make good sf films?*

For my part, when I want a cartoon, I'll turn on Daffy Duck. Until that time, when I hear the apologia, I will respond as would the Tasmanian Devil.

Gene O'Neill wrote "300 S. Montgomery," (July 1984). His latest story concerns a supernatural force that tracks Patrick Manspeaker from the California mountains to the jungle of Vietnam.

The Shadow of the Mountain

BY
GENE O'NEILL

The muggy, predawn darkness of the heavy jungle clings oppressively, alive with crawling, biting bugs— Suddenly unnatural silence.

Ahead of the marine patrol, clustered in a tiny clearing, are six thatched-roof huts. Dark and silent. Reluctant to leave the security of the jungle, the marines pause at the edge of the dense growth and gasp for breath. They listen and peer into the clearing; but there is nothing ... only the stifling stillness. For a few more moments, they hesitate, sweat darkening their camouflaged utilities. Finally the point man moves cautiously along the trail of red mud, his M-16 held like a dowsing rod. As he nears the first hut, the rest of the squad fan out behind him and step into the clearing—

Ponk — A dry, metallic sound overhead, followed by a burst of bril-

liant light that freezes the patrol in place. Instant daylight, fading rapidly to a silvery twilight— *Crack-crack, crack-crack, crack-crack*, tongues of orange flame flick out at the marines from a stand of green bamboo to the far left. They drop, wallow in the mud, and fire their M-16s blindly into the bamboo. *Clunk ... clunk ... clunk*. The echo of mortars firing. The clearing explodes chunks of red mud—

Sudden quiet again, except for an animal-like whimpering that fades away after a few seconds. Then absolute stillness as a blanket of fog descends gradually over the clearing, covering the crumpled rag dolls littering the red mud.

Wet and still....

Patrick Manspeaker groans, stirred to consciousness by a sharp pain deep in his gut. Stabbing, penetrating ... he's

lying doubled over, both hands clutching his stomach, watching blood trickle through his fingertips, staining the mud a deep purple. "Sweet Jesus," he moans through clenched lips, the curse sending another sliver of agony into his stomach. With a mental effort he calls on an inner strength — a remnant of his Ojibwa heritage — and is able to pull himself together enough to look about.

A stillscape.

Patrick manages to crawl a few feet to the crooked body of the navy corpsman assigned to the patrol. For a second the intense pain paralyzes him, making pinwheels of flashing light dance before his eyes.... But he blinks away the tears, and, after taking a long, slow breath, he searches through the corpsman's pack of medical supplies, finding a large gauze compress and two syrettes of morphine. With trembling fingers he injects both tubes of drug into his thigh. Panting from the pain and exertion, he rolls over on his side and rests, letting the morphine dull the gnawing in his gut.

After a few minutes Patrick is able to lift his head and whisper hopefully, "Big O? Big O? Sarge...? Anyone—?"

No answer.

Silence, except for the drone of a mosquito about his head. Patrick resists the impulse to swat the pest, suddenly recalling the tongues of fire from the bamboo. *Charlie!* Holy shit.

Frightened, he rolls back on his chest, willing himself smaller, hunkering down behind the body of the dead corpsman. And he tries to think, sort it all out. The V.C. are in the bamboo.... Everyone in the patrol's probably dead. He shudders at the realization: *I'm all alone.* Alone with Charlie. He stifles a moan. They will take him.... What are they waiting for? Dawn, they must be waiting for dawn. he looks up into the mist, guessing it will be light in half an hour. Then he remembers the bleeding. Oh, my God, stop the bleeding! He peels away the paper from the large bandage and slips the compress inside his shirt, gingerly applying pressure to the wound.

The morphine begins to hit hard, making Patrick drowsy.... He blinks, telling himself he must stay awake, because Charlie will be coming soon.... Coming soon, coming soon. But he is too tired, too sleepy. His eyelids droop, his thoughts drift back to the previous summer ... his grandfather and the mountain and the strange woman....

Patrick had dropped out of Portland State shortly after his father's unexpected death in April. He floated aimlessly for a month or so, living and partying with friends. Then, out of money, he joined the Marine Corps. Driving down Interstate 5 from his Portland home to the Marine Corps

Recruit Depot in San Diego in his old '55 Merc, Patrick was able to focus clearly on his father — the good times (and there were lots of them), the disagreements (and there were few), the man's strengths ... his weaknesses. But as Patrick eased the Merc through the agricultural inspection station into California, he felt an uneasiness grip him ... an undefined mental itch at the back of his mind. He had been thinking of last Christmas — his father; his sister and her husband from Jamestown, North Dakota; and Patrick — all together again. The unsettled feeling increased as he drove south. Then, below Sacramento, the itch surfaced. *It* was the Christmas card from his grandfather, the picture of the mountain. Patrick's dad had gone on and on about *the* mountain.... He thought the Napa Valley was nearby. At a truck stop he pulled the Merc off the freeway and checked his map ... yep, forty miles. Patrick decided to visit his grandfather and see the mysterious mountain.

Harry Manspeaker lived in a ranch-style adobe high on the western slope of Mt. George, overlooking the Napa Valley. That first afternoon, the old man had greeted Patrick warmly and taken him out on the great deck spanning the side of the house to a stunning panoramic view of late spring color. Spread out below the mountain was the community of Napa, surrounded by fields of sun-burnt gold. Up-valley, near the village of St. Hel-

ena, Harry pointed out the older vineyards and famed wineries in the fields of brilliant mustard. At the far end of the valley, the town of Calistoga with its geysers and mud springs was obscured by a bluish haze. The old man moved Patrick to the southerly end of the deck. Thirty miles away the bay sparkled a burnished bronze in the late afternoon sun. "There" — Harry indicated a bridge west of the bay, its burnt-orange color muted slightly by the distance — "that's the Golden Gate ... and San Francisco." The buildings of the city appeared dull gray ... except the Transamerica Building, which glinted through the haze like a triangle sculpted from alabaster. Across the valley due west, the indigo Coast Ranges were shaped like a sleeping maiden: her face the peak of Mt. Tamalpais, her hair trailing south toward the Golden Gate, her body and legs the smaller hills stretching north.

The old man led Patrick off the deck, away from the house to a small outcropping. Several hundred yards below them, a road wound its way from right to left along a canyon rim. "It's part of the old Napa-Monticello Trail," Harry explained. "Dates back to the mid-1800s.... Of course, Monticello's gone now—" He made a gesture with his thumb back over Mt. George toward the northeast. "Yeah, whole town's been under Lake Berryessa since the fifties. But Monticello was an important spot in the old days

— wheat, cattle, and quicksilver mines. The trail was busy then, took two days each way—” He broke off again, pointing down to a grove of plum trees near the trail about three hundred yards north of the adobe. “See that clump of trees, lean-to, and corral—”

Patrick spotted the trees ... and, just visible, the fallen timbers outlining the old corral. He nodded.

“Well, my paw ... your namesake, Patrick ... he built that corral....” The old man shifted his gaze west toward Mt. Tamalpais, his eyes taking on that faraway look. “My maw died of T.B. when I was four. Paw and I left Michigan, finally settling here in 1910. We took care of the horses for the old wagon line. And the rest stop. Didn’t have much more than that lean-to to start with. We planted them plums....” He was staring back down at the grove of trees.

“What’s that reflecting down there, Grandpa?” Patrick had glimpsed a glint of light in the trees.

“Spring,” Harry replied. “Coolest, sweetest water in the valley ... just quail, deer, and other critters use it now.”

They stood quietly for a while, sharing the golden afternoon, the sun beginning to drop toward the indigo hair of the Tamalpais maiden.

After supper, while it was still light, Patrick hiked down to the old corral and spring. The timbers of the fence were indeed rotted and crum-

bling, the lean-to fallen down completely. Nearby, hidden by manzanita and chemise brush, the spring collected into a tiny pool. At the edge of the pool, Patrick knelt and scooped up a drink; but a sound from the far thicket caused him to pause, his hand halfway to his mouth, the water leaking through his fingers. He cocked his head and listened. It had sounded like an animal — kind of a low, deep-throated cough-growl — and it prickled the hair along his bare arms. Harry had said something about a cougar on the mountain. But were they dangerous to humans, especially during the day? God, he wasn’t sure. He remained motionless, still half-frightened—

A rustling.... Then the brush parted and a woman stepped into the clearing. She wore a shock of unruly, auburn hair and men’s clothes, appearing to have stepped from an old sepia photograph or John Wayne western — baggy homespun shirt, dark serge pants partially tucked into scuffed boots — except that there was nothing posed or stagy about her appearance, everything much too well worn.

“Hello,” she said, “I’m sorry if I frightened you. My name is Katy.... You must be Patrick?” She spoke softly but precisely, pronouncing her name as if it were two separate letters. Patrick thought she was about his age, but as she moved nearer, he saw the lines in her face and he realized she was older. But her face was ex-

tremely pale, at odds with the outdoor look of her clothes. And her eyes, too, lacked color — just a trace of blue, like stars on a cold winter night. Inwardly he shivered, feeling uncomfortable in her presence.

"It is Patrick?" she repeated.

"Yes; yes, it is," he answered, finding his voice. "Visiting my grandfather—" He gestured toward Harry's adobe up the mountain. "I was just getting a drink ... looking around the old corral...."

"Ah, the corral." Something flickered in her unusual eyes. She smiled, taking his hand in hers, her grip firm but ice-cold. "You must be very interested in the past ... the corral and all?"

He nodded, too flustered by her steady gaze and chilling touch to say anything more.

She led him from the spring, saying, "Come then, there's something you must see." They moved along the road north for a few minutes in silence to a trail that made a loop uphill then back to the main road. They climbed the trail several hundred feet to a structure made of rocks. "Here," she said softly, "this is it." It was shaped like a cone, about ten feet tall ... a tiny opening at its base, overgrown with poison oak. Patrick stared, shrugging his complete lack of recognition.

"It's a charcoal kiln," the woman explained. "Your great-grandfather made charcoal here.... Then the

wagons, if they had room, backhauled it to Napa or Monticello."

"Charcoal—?" He visualized hamburgers on a barbecue grill.

Katy looked at him for a moment, her cool gaze penetrating, making him shift his feet. "Yes, charcoal. At the turn of the century, nearly everything mechanical — threshers, for example — operated by steam using charcoal for fuel. Patrick cut trees, made charcoal in this kiln, and sold it for fuel."

Patrick mumbled, "I see...." He wondered how she knew so much about so long ago. So much about his great-grandfather.

Katy dropped his hand, staring west. "Sorry, I must go now."

"But wait—?" Patrick said.

She face him squarely, looking into his eyes.

He squirmed. He wasn't sure what he wanted to say. He only knew he wanted very much to see this strange woman again. Finally he blurted, "Will we meet again?"

She smiled, picking a loose thread from his collar, her fingers sending a chill down his back. "I'm sure we will, Patrick."

Then she was gone, moving back down the trail.

Patrick hiked back to the spring and watched the sun drop behind the sleeping maiden, streaking the sky with wisps of golden pink clouds. As he stared into the sunset, he tried to sort out his feelings about the strange

woman.... Questions kept occurring. Who was she? The strange old clothes? Why did she rush off just before sunset? How did she know his name? Even Patrick's grandfather hadn't known he was coming....

He sighed, watching a thick fog-bank roll over the Coast Ranges, slowly fill the valley, then creep up Mt. George. Maybe he would see her tomorrow. Patrick remained at the spring for a few more minutes, but finally the cold mist drove him up the mountain to the comfort of his grandfather's adobe.

Early the next morning, Patrick and Harry hiked the old wagon trail, following it from the spring as it wound around the westerly face of Mt. George. Soon the sun burned off the morning mist, and they started to sweat heavily. Under a great black oak, they stopped for a rest. The trail twisted west and dipped toward Hagen Road and the outskirts of Napa. Far below them at a farmhouse, they heard the faint barking of a dog.

Patrick handed the old man a canteen. He had not slept well the previous night, his dreams filled with encounters with an auburn-haired woman. He needed to know more about the woman called Katy. "I met your neighbor last night at the spring, Grandpa."

Harry, halfway through a long drink, lifted his bushy white eye-

brows. He let the canteen slide away from his mouth. "What neighbor? The nearest people are down there on Hagen Road — five miles away."

"That's strange," Patrick said, rubbing sweat from his forehead with the back of his wrist. He was sure she had said she lived on this side of the mountain.... Or had she? His gaze moved up Mt. George. No homes ... nothing but rock, bushes, and a few oaks. He described the woman and the meeting to Harry.

The old man shook his head and frowned, dropping his gaze and picking up a stick at his feet. "No, Son, no one lives on the mountain now except me...."

Patrick studied the lines etched deeply in his grandfather's face for a moment, sensing there was something more. Harry had seemed so straightforward about everything.... Patrick thought again of the meeting with the woman, her dated clothing. "Did someone *used* to live up here?" he asked, the half-formed thought making him shiver despite the morning heat.

Harry scratched the dust with the stick, as if making up his mind about something. Finally he let the stick slide from his fingers and sighed. "Yes, there was such a gal lived up there in a house that burned down many years ago." He pointed uphill toward a stand of redwoods that appeared unnatural among the rocks and oaks. "Her name was ... Kathleen,

Kathleen Shaw, and she was my paw's friend.... In fact, he died fighting the fire that burned her place down.... Never found her body—"

"When was the fire?"

The old man rubbed his chin. "Let's see ... I was sixteen, so it was 1922."

"But Grandpa, *she* couldn't be the same one, dead almost fifty years ... unless she's a, a...." The serious look in the old man's eyes made the word *ghost* catch in Patrick's throat.

Harry nodded slowly. "Yeah.... Well, not exactly a ghost, boy...." He glanced into the dust again, studying his scratchings, then looked up at Patrick, his voice lower, more controlled. "Do you understand the Ojibwa word *manitou*, Son?"

Patrick thought for a moment, recalling something from one of his father's books. "It means ... Great Spirit—"

"Naw," the old man interrupted, some of the lines softening in his face. "That's white man fluff." He took another drink from the canteen. Then he continued, "When my father came to the mountain, he brought little except a four-year-old half-breed son and a few old beliefs.... He believed in manitou.... It refers to a supernatural force that pervades the world. He believed it was strong on Mt. George, and that's what drew him here from Michigan." Harry handed the canteen back to Patrick. "The legends say a person can absorb manitou, then they

have special powers, like magic — *they have walked in the shadow of the place*.... A manitou is said to be able to take the shape of an animal—"

Overhead, a Cooper's hawk screamed its haunting cry, interrupting the old man's story. And Patrick remembered the cough-growl sound just before Katy appeared at the spring. Spooky....

"Anyhow," Harry continued, "I think I've seen the gal myself ... once since the fire, maybe.... I was hiking down in the canyon below the trail, back there—" He gestured with his left hand back along the trail northwest. "About ten years ago ... I stopped for a rest on the shady side of an outcropping and fell asleep. But a loud snap woke me. The gal was standing on the outcrop, her red hair aswirl, a bullwhip in her hand.... And not two feet from my head was a rattler, its head cut off.... When I looked up, she was gone, but I'm sure it was Kathleen Shaw ... and she hadn't aged a lick since the fire.... I still got the rattles off that snake."

They sat in silence for a minute. Then Harry chuckled and murmured, "Damn fool legend, eh?" He stood up, stretched, and began to move away along the trail.

Dumbfounded by the strange tale, Patrick followed his grandfather silently. Jesus, he thought, Katy would be over eighty ... but that was impossible. Besides, he didn't believe in that old manitou stuff ... walking in the

shadow of the mountain. It was crazy.... Except that something about it tickled part of his soul.... He recalled the subconscious urge to visit the mountain as he drove down Interstate 5. Yeah, that part about the *draw of the mountain ... the idea of manitou as a magnetic sense of place was believable.... But the woman? She was strange, but a manitou? No*, he told himself, but he was not sure he believed.

That night Patrick again slept poorly, dreaming of being chased by a cougar.

Early the following morning, he said good-bye to his grandfather and reluctantly left Mt. George, headed south for the Marine Corps Recruit Depot.

Patrick awakens sluggishly to a deep, burning thirst. At first he's confused by his surroundings ... a dark mugginess ... and bars. He reaches out with one hand. Yes, bars. *Bamboo bars*. He's in a cage! A cage made of bamboo. He becomes aware of shadows flickering in the firelight ... figures, little men in black pajamas ... and their singsong babble. With a sinking heart he realizes they are V.C. He recalls the fire fight and the patrol being wiped out. God, Charlie's got him.... He remembers the wound, looking down at one hand still clasped against his stomach. The blood is dried and crusted on his fingers and utility shirt.... His spirit sags ... so

weak, so tired. And none of it seems real, not happening to him.... Only the heat and the terrible thirst are real.... His eyelids flutter.... Sleep, he needs sleep.... But the thirst. It reminds him of the thirst of the Grinder....

They saw the Grinder that first morning at MCRD: the black heart of the base, over a square mile of asphalt shimmering under the Baja sun of San Diego. But only briefly. Everything was a blur of activity that first day: Heads shaved at the barber shop, seabags packed with new uniforms and gear drawn from supply, teeth inspected by a military dentist, arms poked and scratched with needles by the navy corpsmen, and endless rules — *Do this, Don't do that*. Rules, rules, rules.

Early the second morning, Patrick *really* met the Grinder. Hour after hour pounding its surface, learning to follow the rhythmic barks of his drill instructor, Staff Sergeant Emiliano Zapata. "*Hut, tow, 'ree, 'our ... but, two, 'ree, 'our.*" Across the Grinder, other platoons marched to the cadence of their D.I.'s, each voice distinctly different.

"All right, dammit, you fucking people are as organized as a Chinese fire drill!" Sergeant Zapata shouted at Platoon 2037. " *'Toon, balt!*" The husky Mexican-American, dressed in tailored tropicals with three rows of ribbons and medals decorating his

chest, stood with his hands on his cartridge belt, a swagger stick tucked under his arm, leaning forward slightly, his eyes glaring beneath a campaign hat and matching the deep cordovan of his spit-shined shoes. Only a scruffy bandido moustache marred the recruit-poster image. *The few, the proud, the marines.* After a full minute of silent glaring, Sergeant Zapata began to speak in his normal voice — *not* a trace of Spanish accent, a soft whisper laced with east Texas drawl. “Bounce, bounce, bounce ... all over the place. How many times do I have to tell y’all? From the hips, *¿comprende?*” He demonstrated the proper marching technique, again — a slight lean back, hips absorbing the shock of the legs, body and head remaining vertically motionless. *No* bounce. He glided down one side of the platoon, coming to a stop behind Patrick and the other smaller recruits — feather merchant country.

The sun beat down, sweat streaming down Patrick’s ribs. But he remained at rigid attention, afraid to relax an eyelid with the D.I. so close.

Finally Sergeant Zapata murmured, “I know, I know, it’s hot....” The drawl was thick with menace. “Y’all like to be out somewhere drinking beer, smoking weed, and chasing pussy ... right?”

Together the platoon of seventy-five recruits shouted, “NO, *SIR!*”

An evil smile replaced the glare on the D.I.’s face. “That’s good.... *For-*

ward ... march! Double-time ... march!”

Patrick began to run with the rest of the platoon and winced, feeling a blister forming on his right heel. Just what I need, he thought wryly. Ahead, at the western end of the Grinder, the front of the base theater appeared to sway in the heat waves shimmering off the asphalt. Jesus. Somewhere he had read that San Diego was a stable seventy-five degrees year round. Uh-huh, he thought, everywhere except the Grinder. It must be a hundred, at least.

“*Hut, two, ’ree, ’our ... together, together.*”

Patrick watched the D.I. from the corner of his eye, running easily alongside the platoon, barking cadence. The asshole had kept them on the Grinder since lunch without a break ... and his damn tie wasn’t even *wrinkled*. Patrick tried to swallow, but his mouth and throat were too dry. If only he could unbutton his utility shirt ... but that was forbidden — a shirt buttoned at the throat was the sign of a recruit. Woe to anyone from 2037 caught with his shirt opened during the next twelve weeks. He resigned himself to the heat, his sore heel, and the terrible thirst. Concentrate on the count, he told himself. Keep in step. Hang tough. Don’t drop out.

Sergeant Zapata ran 2037 for another few minutes, finally bringing them to a halt along the northern edge of the Grinder — the restricted

area near the recruit Quonsets. "O.K...." He held up three fingers. "Y'all got three minutes, exactly three and no longer.... 'Toon *twenty thirty-seven*...."

The recruits sucked in the traditional deep breath....

"Dis-missed."

Patrick took one step back with the platoon and shouted: "Aye, aye, sir!" Then he did an about-face and broke into a run. He had been a 440 sprinter at Portland State, and he led the platoon: Down the walk between two rows of Quonsets — careful not to step on the painstakingly raked and watered dirt in front of each hut, recruit grass; then he dashed east up the Big Walk, running past the wood-frame heads of other platoons, slowing only as he turned up the walk to 2037's head—

He almost ran over a stranger stepping from the head. A recruit, but wearing a funny white armband. Patrick slipped by him, anticipating a long, cool drink—

"Hold it!" ordered another marine, standing inside the head, gesturing with a nightstick. He was a recruit — shirt buttoned at the neck — but obviously special, as he wore a helmet liner and pistol cartridge belt. "Fall in behind that prisoner." He pointed at the recruit with the white armband, still standing in the doorway at rigid attention. "You broke prison-chaser ranks," he explained, "so, consider yourself a prisoner."

Frightened and confused. Patrick did not move—

"O.K., my man," a voice boomed behind Patrick, "jes' put that piece down ... 'less you want it stickin' in yo' ass." It was one of the big guys from the platoon, blocking the doorway — Owens, the black guy everyone called Big O. "Get the chief, Johnson," Big O instructed one of the other recruits.

Another big guy darted away toward the D.I. duty hut. The rest of the platoon crowded around the doorway, everyone tense, stiff, alert.

"Kay, now everone jes cool it!" Big O advised, hands on hips.

A few seconds later, Sergeant Zapata hustled up to the head and took charge. "This boy ain't had the UCJM lecture yet, Chaser," the D.I. explained in his soft Texas drawl. "He don't know nothing about brigs or prisoners or chasers.... He's cherry."

A grin broke across the chaser's face.

The D.I. smiled. "So ... y'all take the prisoner and go on about y'all business."

"Yes, sir," the recruit chaser replied; and he marched his prisoner away.

The platoon milled around, laughing and chattering like a ball club after a big win.

Sergeant Zapata moved out of the rest room into the middle of the mob, the smile gone from his face, standing quietly as the gaiety died. "Y'all

got two minutes to finish here and haul ass back to that Grinder.... And Manspeaker, y'all see me tonight in he duty hut." He spun about and walked off smartly.

Patrick stifled a groan—

There was a rush for the two drinking fountains in the head....

Later, after several classes and a rushed dinner, the platoon gathered in the middle hut of their three Quonsets. Each recruit carried a set of tropicals — a worsted dress shirt and trousers.

As Sergeant Zapata walked into the hut carrying a small paper bag, someone shouted, "At-ten-tion!"

Everyone leaped up.

"*At ease*," the D.I. ordered. He took a pair of trousers from the nearest recruit. "We're gonna have an inspection soon, so lissen up." He pulled a footlocker out from the nearest set of bunks and draped a towel over it. "Iron—?"

Someone handed him a steam iron.

"O.K.," he said, kneeling beside the jerry-rigged ironing board. He pulled the trousers inside out, lightly waxed each crease with a bar of paraffin from the plastic bag, and pressed a knife-sharp crease in each trouser leg. "*¿Comprende?*" he said, holding up the finished trousers. Then he picked up a shirt and repeated the process, pressing in sharp creases both front

and back. After he finished, he began to hand back the shirt to its owner— But he paused, taking the shirt back. "Uh-oh," Sergeant Zapata groaned, a pained expression on his face. He held up the shirt at arm's length, so all could see. "*This*," he said gesturing to a stray thread extending from a buttonhole on the chest pocket. "This," he repeated, his voice thick with disgust, "is an Irish pennant." He glared at the offensive thread as if it were something diseased; then he searched the nearby recruit faces—"Donovan, get up here!"

A recruit shouldered his way forward to the D.I.

"Y'all Irish?" Sergeant Zapata asked, making it sound more like an accusation than a question.

"Yes, sir!" Donovan answered.

"Good," the D.I. said, nodding and handing the recruit the shirt. "Show us how to get rid of an Irish pennant."

For a moment the bewildered Donovan did nothing; then he tentatively grasped the thread as if to pull it out.

Sergeant Zapata grabbed his wrist. "Hold it!" The D.I. glared at Donovan. "Y'all must be from Northern Ireland, asshole."

Not knowing how to answer, Donovan said nothing, his face growing red.

Sergeant Zapata waved Donovan back into the crowd. "These little devils fail a man at inspection.... But y'all don't just pull 'em off for chris-

sake...." His voice lowered in tone, as if he were telling a spooky story to kids. "If y'all pull one, it could unravel the seam ... maybe the whole shirt ... maybe even *you*.... And none of y'all can afford to lose a grip on yourselves." He took fingernail clippers from his pocket. "Watch." Carefully he clipped off the Irish pennant. "O.K.," he said, throwing the shirt to its owner. "Now ... wax 'em, iron 'em, and clip 'em. Donovan—?"

"Y-y-yes, sir," the recruit stammered, still flustered.

"Want y'all to take the pennants out back.... Bury each one *separate*.... Don't want none of 'em little devils to re-*por*-duce."

"Aye, aye, sir," Donovan answered.

Sergeant Zapata started to leave the hut, but stopped and snapped his fingers. "Manspeaker—?"

"Yes, sir," Patrick answered, his chest tightening. He had hung back, hoping to keep a low profile.

"See me in the duty hut in five minutes."

"Aye, aye, sir," Patrick said. *Dammit*, he swore silently. He'd hoped the D.I. would've forgotten the head incident by now. No such luck.

Four minutes later, Patrick stood in front of the duty hut, mentally reviewing each step of the traditional procedure for entering the D.I.'s lair. Just to the right of the doorway, the metal was buckled in and stained a greasy black by the hands of thousands of recruits, Patrick's predecessors.

Taking a deep breath and steeling himself, he drove his palm into the spot three times — *blam, blam, blam*. Then he shouted, "Sir, Private Manspeaker requests permission to enter the duty hut, sir!"

"Can't hear ya, pussy."

Patrick repeated the procedure, screaming at the top of his lungs.

"Get in here, shithead."

Careful to follow the format, Patrick took one step into the doorway, simultaneously removing his utility cap and pushing it into his rear pocket. He took three steps forward and did a left face in front of the duty desk for Platoon 2037, glimpsing another desk and D.I. to the right of the doorway.

Speaking precisely, he said, "Sir, Private Manspeaker reporting as ordered, sir."

Sergeant Zapata looked up from a file and nodded. "O.K.... not too shabby." He was not wearing the campaign hat; and his hair was clipped short, his forehead pale above a line made by the hat. "Not bad," he repeated, commenting on Patrick's perfect execution of the entry procedure. "Hmmm ... says here y'all an Indian, Manspeaker. That an Indian name?"

"Yes, sir ... one-eighth Ojibwa, sir."

"Yeah, well, it don't make ya special, here, ¿*comprende*? Y'all same as the others ... shitheads trying to become marines.... And y'all ain't getting off too good, Manspeaker ... but I'm

here to help." He flashed Patrick a humorless grin. "Yep, I've been ordered by the company commander to keep a special eye on ya.... They think ya got *po-tential* ... college always impresses them officers. Don't know why with y'all 'cause, as I read it, y'all a *quitter*, Manspeaker." He glared at Patrick, the smile gone from his two-toned face. "No quitting here, boy. Ya try it and I'll be all over y'all like a cheap suit ... ¿*comprende?*"

"Yes, sir."

"O.K. Haul y'all's one-eighth red ass oughta here, *pronto!*"

Patrick executed the entry procedure in reverse, sighing with relief as he stepped outside. His stomach muscles ached from the tension. He hurried back to his hut, anxious to get his tropicals pressed before lights-out.

Later, after everyone in the platoon had showered, Sergeant Zapata turned out the lights in Patrick's hut. "Rack time."

After a moment's silence, someone whispered, "Might as well go to sleep, 'cuz there ain't *no* broads."

At the other end of the hut, a deep groan and the voice of Big O: "A damned shame, too ... me with this thing over here, *barder* than Chinese arithmetic. Oh, Lordy, it's gonna be a long three months."

The recruits laughed—

Suddenly the lights were on. "O.K., shitheads, *up.*" Sergeant Zapata stood glaring in the doorway. "Not tired?

O.K. ... everyone into the middle hut."

The recruits scurried into the middle hut, dressed only in their skivvy shorts, shirts, and shower shoes.

The D.I. let them remain at attention. "We gonna play Air Raid and Flood," he explained, gesturing at the bunks with his swagger stick. "Air Raid, ya get under them racks ... flood, everyone on top of the racks."

Patrick stared at the skinny bunks for twenty-five men, wondering how they would *all* fit—

"It's an air raid!" shouted Sergeant Zapata.

Patrick scrambled under a bunk and was smashed flat by two other recruits piling on top of him. He could hardly breathe, but he felt fortunate, watching the D.I. cracking everything protruding from the safety of a bunk — legs, arms, butts, heads.

"O.K., it's a flood."

There was a mad scramble for the top bunks ... clawing, pushing, shoving. Again Patrick made it to safety, but some of the other recruits fell back, unable to secure a spot on a bunk. They looked sheepish standing in their skivvies.

"Y'all dead, shitbird," announced Sergeant Zapata, swatting one of the *drowned* recruits with his stick. "And y'all, too...." He directed the dead recruits outside to double-time in place, shouting at the top of their lungs: "I am a dead shitbird, sir!" Over and over.

"It's an air raid...."

"It's a flood...."

And on it went for another hour. Patrick gasped for breath, sitting on a top bunk. He had survived ten floods, ten air raids. Three quarters of the platoon were outside shouting. Half the bedcovers were pulled off the bunks, gear littering the floor. The survivors were tired and sweaty.

"O.K., everyone on that Grinder, pronto!" the D.I. ordered hoarsely.

Patrick ran with the others and formed up on the Grinder. The huge expanse of empty blacktop was eerie in the moonlight.

Sergeant Zapata ran them for ten minutes, shower shoes slapping the asphalt, preventing a sharpness in their cadence. Finally they stopped, completely exhausted. The Grinder lay quiet in the muggy summer night.

"Now, rack time means: Go-to-sleep," explained Sergeant Zapata, fatigue making his voice a raspy whisper. "Y'all understand?"

"Yes, sir," 2037 shouted back.

"'Toon twenty thirty-seven...."

Patrick sucked in a deep breath.... He left the Grinder hot, tired, and thirsty ... so *thirsty*....

A sound jars Patrick from the dream of the Grinder, back to the reality of his situation.... He's burning up from fever, the ache throbbing in his gut, and so weak.... The bamboo bars of his cage, wet from the night mist ... and a strong smell of urine.... He's bleeding again, a slow, thin

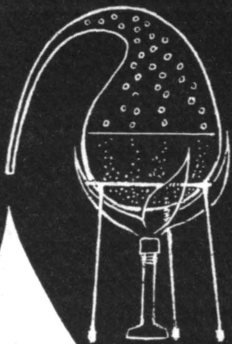
trickle.... Between his fingers dangled a blood-encrusted thread — an Irish pennant, a red Irish pennant. The face of Sergeant Zapata flashes before his eyes, and he can almost hear the D.I.'s east Texas drawl: *Y'all don't just pull 'em off....* The image fades. He becomes aware of a deep weariness, bone-deep ... so tired.... A shadow flickers in front of the nearby fire — one of the pajama men. But Patrick no longer cares, because he knows he is *dying*. The thought makes him retch, the sudden movement increasing the flow of blood, the pain. Dying alone. Despair mixes with the weariness and pain. It's not fair.... His remaining strength wanes.... He slips back into semiconsciousness....

The mountain ... he sees the mountain and the spring, glistening in the sunlight.... Something disturbs the bushes, moving into the clearing near the pool— The cougar. It peers into the water, as if examining something ... then it dips its paw into the water....

Patrick's eyes flicker open. God, He is on fire—

The mist around the cage seems to part.... A hand reaches into the cage and strokes his brow, the touch cool ... Then the hand grasps the red Irish pennant and tugs gently.... He feels his shirt unravel ... then the clothes dropping from his body.... And he is spinning like a top ... moving rapidly.... And cool, so cool ... as if he has shifted from burning sunlight into a cooling shadow....

Science



ISAAC ASIMOV

I was one of those on the speaker's platform on the first evening of the annual four-day seminar I conduct each summer, and an active, bright-eyed boy, seated in the front row asked a penetrating question. As is my wont in such cases, I fixed him with my own glittering eye and said, "You're twelve years old, aren't you?"

And, as is also invariably the case, he answered, "Yes, how did you know?"

It was easy to know. As I explained once in an earlier essay, bright kids who are younger than twelve are inhibited by insecurity, while those older than twelve are inhibited by social responsibility. At twelve, their only aim in life is to make speakers miserable.

This twelve-year-old, whose name was Alex, was amused by my explanation. He was a likable youngster, and over the next few days I much enjoyed his company. Naturally, I couldn't resist playing verbal games with him, and I didn't have it all my own way, either — don't think it.

At one point he casually mentioned his upcoming bar-mitzvah in October, so I said, "I guess you'll be turning thirteen then."

"Yes, I will be," said Alex.

"You won't be twelve anymore."

"No, I won't."

"You'll just be an ordinary dumb thirteen-year-old, eh, Alex?" I said,

and smiled affectionately at him with a fatuous unawareness of the trap I had laid for myself.

Alex was aware, though. He looked up at me seriously and said, "Was that what happened to you when you turned thirteen?"

The smile wiped off my face at once, for it was clear checkmate. All I could possibly say was a hollow, "I was an exception," to which the kid at once replied, "And so will I be."

Well, it does me good to be wiped out once in a while, and it did make a funny story, even though it was at my own expense. But it does make me just a bit less self-assured about my ability to go on with my account of the production of electricity.

Still, what choice do I have?

I ended last month's essay by discussing a possible electric cell involving a zinc electrode in a zinc sulfate solution and a copper electrode in a copper sulfate solution — just to show the principles involved in chemical cells that produce electricity. In this particular example, however, the chemical reactions would take place so slowly that only a tiny electric current would be produced, one that would be far too small to be of any practical use.

The easiest way of correcting this is to acidify the solution in which the electrodes rest. In effect, then, you have the zinc and copper immersed in dilute sulfuric acid. The zinc (which is much more chemically active than copper is) tends, if anything, to react with the acid too rapidly, so it is protected by a coating of inactive mercury to slow the reaction down a bit.

In the reaction, the zinc gives off zinc ions, while the copper absorbs copper ions. The essential chemical reaction is this: zinc plus copper sulfate yields zinc sulfate plus copper. In this reaction, electrons are transferred from the copper to the zinc, and from the zinc, through the circuit of wire and instruments, back to the copper.

Under these conditions, the current is strong enough to be useful, and it should continue till the chemical reaction is complete and all the zinc is dissolved. Unfortunately, it doesn't. The current fades off and stops in a surprisingly short time.

The matter was taken up by an English scientist, John Frederic Daniell (1790-1845). He located the trouble. In the course of the reaction, hydrogen gas is liberated from the sulfuric acid. This hydrogen tends to accumulate at the copper electrode and insulate it so that it becomes

less and less capable of taking part in the chemical reaction. As a result, the current dwindles and dies.

Daniell, therefore, attempted to make it less easy for the hydrogen to get to the copper. In 1836, he designed an electric cell in which the zinc and the sulfuric acid were inside an ox's gullet. The ox's gullet, with its contents, was then placed inside a copper container holding a solution of copper sulfate.

As a result of this, the hydrogen formed remains in the vicinity of the zinc and only slowly filters through the porous barrier of the gullet. Once outside the gullet, the hydrogen reacts with the copper sulfate, forming sulfuric acid and copper — the copper plating out on the walls of the container. The hydrogen comes through at so slow a rate, however, that appreciable amounts do not have a chance to avoid reaction with the copper sulfate and to accumulate on the copper.

Such a "Daniell cell" continues to produce electricity in sizable amounts for a prolonged period, and it was the first practical battery. (The ox gullet was quickly replaced by unglazed porcelain, which was easier to deal with and through which hydrogen could pass with equal infacility.)

One disadvantage of the Daniell cell is that it had to be freshly constructed just before use. If one constructs such a cell and then allows it to stand about for a period of time before use, the materials inside and outside the unglazed porcelain gradually leak across, and much or all the chemical reaction would take place before you had a chance to make use of it. A second disadvantage is, of course, that copper is a rather expensive material.

In 1867, A French engineer, Georges Leclanché (1839-1882), devised another kind of chemical cell, one which did not use copper. Inside the pot of unglazed porcelain, he placed a carbon rod (carbon is very cheap) and packed it around with powdered carbon and manganese dioxide. He then placed the pot in a larger container filled with a solution of ammonium chloride. He also placed a zinc rod in the container. In this "Leclanché cell," electrons flowed from the zinc to the carbon.

In the course of the next twenty years, the Leclanché cell was modified by adding flour and plaster of Paris to the ammonium chloride solution in order to make it a stiff paste. The unglazed porcelain was replaced by a fabric sack. The zinc rod became a zinc container in which the paste was placed, with the carbon rod and its surroundings,

including the fabric, thrust into the paste. The top was sealed off with pitch and the whole enclosed by cardboard.

The result is what is usually referred to when we speak, nowadays, simply of a "battery." It is also called a "dry cell." It is not really dry, since if we were to cut it open we would find it to be moist. (It couldn't work if it were truly dry.) However, it is dry on the outside, and as long as it is intact, it can't be spilled. It can be carried in the pocket, it can be used upside down, and to the average citizen it does indeed seem to be thoroughly dry.

Sometimes it is called a "flashlight battery" because its use in flashlights was once the way in which most people came in contact with it. Nowadays, of course, it comes in all sizes and shapes and is used in all the electrified games which are sold with "batteries not included," and to run all portable electronic devices from radios to computers.

In the last hundred years, a variety of different cells have been developed, each with its advantages and disadvantages, each with some uses to which it is particularly adapted. Yet even at the present time, some ninety percent of all the batteries used are Leclanché cells. It is still the workhorse.

And yet the Leclanché cell, whatever its advantage, produces electricity by oxidizing zinc or, to put it more graphically, burning zinc. Zinc is not a terribly expensive substance, but it's not terribly cheap, either. If you had to burn zinc in your furnace or in your automobile engine, you'd quickly discover you couldn't afford to stay warm in the winter or drive your car very often.

The only reason batteries can be used at reasonable cost is that they do jobs in which the energy requirements are low. It doesn't take much energy to run a radio, or a clock, or any of the other battery-operated gadgets.

For really high-energy requirements one must burn various "fuels," which are readily available substances that burn in air and give off heat in the process. Fuels are usually carbon-containing substances — for example, wood, coal, and various petroleum fractions such as natural gas, gasoline, kerosene and fuel oil.

Can one burn a fuel in a chemical cell (a "fuel cell") and get electricity out of it, instead of heat? It is possible, of course, to burn fuel in the ordinary fashion and use the heat energy to form electricity in

various ways. The use of heat, however, limits the efficiency. Try as you will, if one goes from fuel to heat to electricity one ends with, at best, only 40 to 50 percent of the available energy converted into electricity. In an electric cell, nearly 100 percent of the energy would be converted into electricity.

The first person to develop a fuel cell was an English lawyer, William Robert Grove (1811-1896), who found that he was more interested in electrical experimentation than in his legal practice.

In 1839, he devised a chemical cell that consisted of two platinum electrodes placed in dilute sulfuric acid. If that were all there were to it, of course, then there would be no chance of getting electricity out of it. With two electrodes of identical character there would be no reasons for electrons to go from one to the other. Even if, for some reason, there were, platinum is a very inert metal that undergoes no chemical reactions in dilute sulfuric acid, and without chemical reactions, a chemical cell won't work.

However, although platinum is inert itself, its surface, when clean, offers a good site for chemical reactions involving other substances. Platinum is, in other words, a "catalyst," which hastens chemical reactions without itself taking any apparent part in them. This was first discovered in 1816 by the English chemist Humphry Davy (1778-1829).

In the 1820's a German chemist, Johann Wolfgang Döbereiner (1780-1849), put this catalytic property of platinum to use. He found that when he played a jet of hydrogen on a quantity of powdered platinum, the hydrogen combined with the oxygen in the air so vigorously that it burst into flame. (Without the catalytic effect of the platinum, the hydrogen would not combine with the oxygen unless it were strongly heated.)

This was actually the first lighter of the modern type for tobacco users, and, for a time, it was popular. By 1828, some 20,000 of these lighters were in use in Germany and in Great Britain, but since Döbereiner hadn't patented the device he never earned a penny. Besides, it proved no more than a passing fad for reasons I will explain in a moment.

Grove knew of Döbereiner's work, of course, and it occurred to him that platinum might exert its catalytic effect in an electric cell as well as outside it. He therefore upended a test-tube of hydrogen over one platinum electrode, and a test-tube of oxygen over the other. Essentially, what he then had was a hydrogen electrode and an oxygen electrode.

Grove did obtain an electric current from this cell. He constructed fifty of them and wired them together and, in this way, obtained quite a powerful current.

This might seem a great achievement. The platinum was not used up no matter how long the cell operated. Neither was the sulfuric acid. The only change that took place within the cell was that electrons passed from the hydrogen to the oxygen, which was the equivalent, chemically, of the combination of hydrogen and oxygen to form water. This meant, of course, that the water content of the cell increased and that the sulfuric acid was constantly getting more dilute, but if water were somehow removed from the cell periodically, that would take care of that.

As a means of showing that fuel cells were possible, Grove's cell was a complete success. As a means of showing they were *practical*, however, it was a failure.

While hydrogen can be classified as a fuel, it is as inconvenient and as expensive as a fuel can be. It does not occur on Earth as such, but must be formed by methods that consume energy.

Then, too, platinum is an exceedingly expensive substance. To be sure, the platinum is not used up in the process and is always there, but if we imagine more and more Grove cells being manufactured for a variety of uses, the capital investment in immobilized platinum would grow rapidly.

Besides, although the platinum is not consumed, it is rendered useless very easily. Platinum's catalytic properties exist only if the surface is uncontaminated. Hydrogen or oxygen molecules can attach themselves temporarily to that surface and then be released after giving off or taking up electrons. There are many substances, however, that will attach themselves to the platinum surface and will then have little tendency to be released. They remain as a monomolecular film over the platinum, invisible to the eye, but preventing molecules such as those of hydrogen and oxygen from getting to the surface.

The platinum is, in that case, "poisoned" and no longer exerts its catalytic power of bringing about a combination of hydrogen and oxygen. Until such time as the platinum is removed and cleaned the fuel cell won't work. (It is for these same reasons that Döbereiner's lighter proved impractical and was soon given up.)

It turned out to be difficult to convert a fuel cell that was practical in addition to being feasible. About 1900, another try was made by an American, W. W. Jacques. He took a number of steps in the right direction in his version.

To begin with, he did away with platinum and didn't make use of relatively expensive hydrogen. Instead he made use of a carbon rod, which could be easily formed out of coal, than which hardly anything is cheaper.

The carbon rod was placed into molten sodium hydroxide, which was, in turn, contained in an iron pot. The iron (cheapest of metals) was the other electrode. Air (not oxygen) was bubbled up past the carbon rod and, ideally, the carbon ought to combine with the oxygen in the air to form carbon dioxide, thus producing an electric current. And so it did.

One might imagine that the Jacques cell would represent an irreducible minimum in expense since it is difficult to imagine coal, iron and air being replaced by anything cheaper still. There were, however, two catches. First, the cell had to be continuously heated to keep the sodium hydroxide molten, and that meant an expenditure of energy. Second, the carbon dioxide that was formed didn't just bubble off; it combined with the relatively expensive sodium hydroxide to form the dirt-cheap sodium carbonate.

So the Jacques cell, too, was a theoretical success and a practical failure. All attempts at further modification in the direction of practicality have failed. Fuel cells do exist and can be used for highly-specialized work, but, to this day, none are cheap enough and practical enough to be used widely by the general public. The Leclanché dry cell remains the work-horse.

All the electric cells I've mentioned so far are used till they stop working and then they must be thrown away — unless you want to keep one for a curio or a good luck piece.

That seems sad. After all, if a chemical reaction takes place releasing an electric current in a particular direction, could one not reverse things? Could one not force an electric current through a cell in the opposite direction and in that way reverse the chemical reaction? Then, when the chemical reaction is reversed to the extent that the cell is in its original state, we could make use of it a second time, then reverse it again, and so on indefinitely.

In theory, that sounds plausible. Chemical reactions *can* be reversed if all the products of the reaction are retained and if there has not been a serious change in the state of order (that is, a too-large "entropy increase").

For instance, zinc reacts with sulfuric acid to form hydrogen and zinc sulfate. If the hydrogen is allowed to escape, a simple reversal of conditions is not going to force the zinc sulfate to change back into zinc and sulfuric acid. It needs the vanished hydrogen, too, and supplying it can be expensive.

Again, if you heat sugar and break it down into carbon and vapors, then even if you save the vapors and shake them up with the carbon, you are not going to reverse the situation and obtain sugar again. The sugar breakdown represents a high degree of entropy increase, and that won't lend itself to simple reversal.

We are all perfectly well aware of this. Even children, without any knowledge of entropy, rapidly gain the experience to know that some things are irreversible. Witness the following rather gruesome Mother Goose rhyme which I think children find funny because they recognize its grotesque impossibility.

There was a man in our town, and he was wondrous wise.

He jumped into a bramble bush, and scratched out both his eyes.

And when he found that they were gone, he quick with might and main

Jumped back into the bramble bush, and scratched them in again.

Yet some chemical reactions that yield an electric current *can* be reversed by an opposing electric current. In one direction of the chemical reaction an electric current appears, as chemical energy is converted to electrical energy. If a current is forced through in the opposite direction, the original state of the cell is restored and the electricity disappears, as electrical energy is converted to chemical energy. The cell seems to accumulate and immobilize electrical energy, storing it for future use. Such a cell can be called an "accumulator," or a "storage battery."

A storage battery can be run back and forth indefinitely. It can be "discharged," converting chemical energy into electrical energy, and it can be "recharged," converting electrical energy into chemical energy, and this can be done over and over again.

Storage batteries are also called "secondary batteries" to distinguish them from objects like the ordinary dry cells and similar devices, which cannot be recharged and which are called "primary batteries." (In all honesty, I don't see why the one-use batteries are primary and the reusable ones secondary. Is it just that the former came into use first, or is there a more sensible rationale?)

In 1859, a French physicist Gaston Planté (1834-1889) constructed

the first accumulator. What he did was to take two sheets of lead with an insulating sheet of rubber between them. He then rolled the lead sheets into a spiral (lead is a soft metal) and upended the resulting spiral into dilute sulfuric acid. Since lead reacts with sulfuric acid, the acid soon came to contain lead sulfate. Planté found that when he ran an electric current into one of the lead sheets and out the other, it produced a chemical change, and stored electrical energy in the process. From the charged sheets, he could draw an electric current until the cell was discharged, and then he could recharge it again.

Eventually, he took nine such lead double-spirals, hooked them together, enclosed the whole thing in a box, and demonstrated he could produce surprising quantities of electricity.

When Planté's storage battery was studied, it was found that, after being charged, one lead plate was covered with lead dioxide, the other with a spongy coating of finely-divided lead.

The thing to do, then, was to start with that situation. Nowadays, the "lead-acid storage battery" consists of a number of flat gridworks of lead separated by insulators. Every other gridwork is plastered with lead dioxide, while the ones between are plastered with spongy lead. As the electric current is drawn off, both the lead dioxide and the spongy lead react with sulfuric acid to form lead sulfate and water.

However, when an electric current is forced through the battery in the opposite direction, lead and lead dioxide are formed again as the lead sulfate disappears and sulfuric acid reappears.

Lead-acid storage batteries are the familiar batteries used in automobiles and other vehicles. They supply the heavy discharge of electricity needed to start the car in the first place (after which, gasoline explosions in the cylinder keep it going) and in addition, of course, a steady flow of electricity for the headlights, the radio, the power windows, the cigarette lighter and all the other electrical equipment.

Nor does all this necessarily discharge the battery, since while the car runs, some of the energy of the burning gasoline is used to create an electric current that will serve to recharge the battery. The storage battery works for years, usually, without running down, unless you put an unusual demand upon it as, for instance, in trying over and over to start a balky car until the battery, exhausted, dies on you. Or else you might inadvertantly park the car with the headlights on, and then go off and leave it in that condition for an extended period of time.

Of course, as discharge and recharge go on for month after month,

gathering flaws accumulate in the plates (nothing is perfect), and eventually, the battery's ability to store electricity dwindles and it cannot be effectively recharged to more than partial capacity. You will then have trouble starting your car under even slightly difficult conditions, and the battery is more likely to end up dead at inconvenient moments. The only way out, then, is to buy a new battery.

If battery charging goes on past the full capacity of the battery to store energy, the water in the sulfuric acid solution breaks up into hydrogen and oxygen, which bubble off. Little by little, the water level sinks, until the upper end of the plates is exposed. Water must therefore be added now and then to avoid such an eventuality.

There are other types of storage batteries than the lead-acid variety. Thomas Alva Edison (1847-1931) devised a "nickel-iron battery," for instance, shortly after 1900. Still other types are "nickel-cadmium" and "silver-zinc."

The chief drawback of the lead-acid storage battery is that it is heavy. The others are all lighter, but are also more expensive and don't yield as large a slug of electricity when called upon. For that reason, the lead-acid storage battery, which was the first to be devised, is still by far the most used. But where does the electricity come from that recharges the storage battery?

The sad thing is that, in accordance with the second law of thermodynamics (otherwise known as "the general nastiness of the Universe"), it always takes more electrical energy to recharge the battery than the amount of energy it will deliver on discharge.

If, then, we had to use battery electricity to recharge a storage battery, we'd be faced with a losing proposition. If, for instance, a storage battery produced as much electrical energy as five ordinary electric cells, but it took six ordinary electric cells to recharge it, then it would be better to use the five ordinary electric cells to do the work of the storage battery in each discharge cycle.

If batteries were the only source of energy, then storage batteries, in other words, would simply be a way of using up chemical cells more quickly than would otherwise be true.

Storage batteries can be of no use whatever, therefore, unless they can be charged by electricity that is produced by some means *other* and *cheaper* than by chemical cells.

Fortunately, there is such a means of production of electricity, and we'll get into that subject next month.

Music has been known to raise the spirits, inspire armies to victory, entice lovers. In his second story for F&SF, Bradley Denton ("The Music of the Spheres," March 1984), once again ably and humorously utilizes the theme of music. In "Top of the Charts" we find that some music really does have charms to soothe the savage breast.

Top of the Charts

BY

BRADLEY DENTON

The transubstantiation of *Homo sapiens* was nowhere in my thoughts the first time Dr. Joe came into the shop. He was wearing a three-piece suit with a little flag pin in the necktie, and my immediate reaction was that he didn't belong in Electroshock Records and Tapes.

The Pretenders were blasting out "Bad Boys Get Spanked" from all four corners, and Dr. Joe's face twisted in pain. But his eyes radiated determination as he walked up to me at the counter and said something.

"What?" I asked.

He said something again. Reluctantly, I reached behind me and turned down the volume.

"Thank you," he said stiffly. "I am Dr. Joseph Wright, and I would like to see the manager, young lady."

"You're looking at her, elderly sir," I said. He wasn't old, maybe mid-

forties, but ever since I was three it's tickled me off to be called "young lady," even by somebody too stupid to realize it's insulting. "The store owner is in the Bahamas and has left me in charge. May I help you find anything?"

Dr. Joe looked displeased. "If you're in charge," he said, "does that mean you're in charge of *everything*?"

I reached behind me and turned up the volume a little. Dr. Joe winced.

"Yeah," I said. "I've been running the place for seven months. The owner doesn't like customer interaction."

Dr. Joe opened a briefcase and removed two white posters with black lettering. "I'd like you to put these in your front window."

I held out my hand for them. We put up posters for almost anything —

chili feeds, concerts, druid prayer vigils, whatever. There was always room for a few more, if I took down those that were six months out of date.

Usually I didn't give them half a glance, but the block letters of Dr. Joe's posters jumped out at me:

WARNING TO PARENTS AND THEIR CHILDREN: MANY OF THE RECORD ALBUMS IN THIS STORE CONTAIN SATANIC MESSAGES CONCEALED BY THE SUBLIMINAL TECHNIQUE OF BACKWARD MASKING. BUYING AND LISTENING TO THESE RECORD ALBUMS IS DANGEROUS TO YOUR MENTAL AND SPIRITUAL WELL-BEING.

Dr. Joe was already heading out the door. I lifted the stylus off the Pretenders, and the silence stunned several browsing patrons.

"Halt, Fascist," I said to Dr. Joe's retreating backside.

He spun around. His face was red, and with a fleshy face like his, that was a lot of color.

"Just kidding," I said as he returned. "Just trying to get your attention."

He put both hands on the counter and glared at me.

I regretted calling him back. I'm five-three and weighed 107. Dr. Joe was at least six-two and weighed — well, imagine a water buffalo in a three-piece suit.

"You see, sir," I said as my fingers fumbled with the chain of the whistle I always wear, "I cannot place these posters in the window. Even were

their statements true, your imagined complaint would be with the record companies. We're only a retailer."

He took them back. "May I demonstrate something?"

I thought about it.

"No," I said after a tenth of a second.

He came around the counter.

"No customers are allowed on this side of the register," I said, backing away from him. "I have orders to call the authorities."

He went to the turntable. I'd turned it off, but the amplifier was still on.

Dr. Joe placed the stylus in the middle of a track and spun the Pretenders backward.

The windows nearly broke.

I hadn't been kidding when I'd said that my boss didn't like customer interaction. He liked it so little that he had long ago put a sawed-off softball bat under the counter. I chased Dr. Joe out of the store with it.

"Give me a chance to prove my claim!" he shouted once he was across the street.

"Give me a chance to crush your chitin!" I yelled, and went back inside to call the police.

The officer I talked to emphasized that he wouldn't be surprised if there *were* satanic messages on the records I sold.

"I sell Satie and Stravinsky, too, you know," I said.

"Twisted punks," the officer re-

plied. He then told me that Dr. (of Divinity) Joseph Wright was pastor of the largest television congregation in the region and a highly respected man.

"He's a Looney Tune," I informed the officer, who hung up on me.

I sold a couple of cutouts, a Bach cassette, and a copy of the new Mangled Orphans EP, and pretty soon I began to feel better. If Dr. Joe was really respectable, he wouldn't come back. Kansas City boasted at least thirty classier record stores that he could terrorize to his heart's content.

At eight o'clock my night clerk, BooBoo (who wouldn't respond to his real name even when I remembered it), came in to take over. I told him about Dr. Joe.

"Wild," BooBoo said. "Wild" was BooBoo's response to everything from pancakes to the threat of nuclear vaporization. Some would have considered him to be a little on the defective side, but he knew the lyrics to everything Bruce Springsteen ever wrote.

I showed BooBoo where the sawed-off softball bat was, in case Dr. Joe tried to make a nighttime raid.

BooBoo seemed to like the bat. "Wild," he said.

I left the store in his capable hands and drove to Randall's apartment. Randall was the least degenerate of my boyfriends and, after a day of Electroshock patrons, a nice, quiet, neo-classical cheese-ball eater was just what I needed.

We sipped white wine and listened to Rachmaninoff. I told Randall about Dr. Joe, and he was sympathetic. He didn't care for progressive music, but he knew that rock didn't resort to tricks like backward masking.

"It perverts the masses quite well enough without that," he said.

I hit him with a sofa pillow.

"You're an extraordinarily exciting woman, Terri," he said.

"You're an excruciatingly boring man."

"Yes, and you love it, too."

After a while we got back to the subject of Dr. Joe, and I worried about what I'd do if he came back.

"Let him put up the posters," Randall suggested. "After all, how many of your patrons can read? And even if the 'warning' is noticed, will that deter anyone? People love to buy things that are bad for them. Witness the megabucks pulled in by tobacco, alcohol, pot, cocaine, and diet soda."

I realized he was right, and called BooBoo at the store.

"Listen," I said, "if Dr. Joe comes in, don't give him any trouble. Put up the posters. Use our tape."

"Wild," BooBoo said.

"I mean it," I said, afraid that BooBoo didn't understand. "Be nice. Be his buddy."

"Tramps like us," BooBoo said. "Baby, we were born to run."

I hung up, and Randall and I continued our pleasant neoclassical evening. Sometime after two I drove

home to my own apartment, playing the Stones on the car tape deck. I wondered what "Sympathy for the Devil" would sound like backward, and decided it didn't matter. Human civilization was wonderful.

Dr. Joe came back the next day while I was putting out new albums. This time he carried a portable record player.

"Dr. Wright," I said, smiling my best I'd-love-to-lick-your-shoes smile, "of course we'd be glad to put up your posters. We of Electroshock Records and Tapes believe in public service."

Dr. Joe frowned and went to the counter. I followed, afraid that he might break something. I had a stack of albums in my hands, and if worst came to worst, I could use them to deck him.

He put the record player on the counter, removed the lid, and opened his briefcase. "I know you only want to get rid of me, young lady," he said.

I felt my upper lip curling back.

"However," Dr. Joe continued, "this time I'm not leaving until I perform a demonstration. I'm as concerned for your soul as I am for the souls of your customers."

I thanked him profusely and asked him to go right home and pray for me for a week or two.

He paid no attention and found a socket to plug in his record player.

"This turntable is belt-driven," he said, "and I've put a twist in the belt so it runs backward." He took a copy of *Buddy Holly Lives* from his briefcase and cued up "Not Fade Away" at the end of the track.

"Now listen," Dr. Joe said. "You can quite clearly hear the words, 'Come kiss Satan on the lips, perverse children of the eighties.'"

He played it and gesticulated vigorously when the phrase occurred. I had to admit that if I tried, I could hear words. But they were something like, "Use two cups of flour and ice-skate naked."

I suggested that since Buddy Holly had been dead for a quarter of a century, he could have no desire to make the children of the eighties kiss anybody anywhere. Dr. Joe huffily noted that satanic powers weren't bound by the grave.

I was more convinced than ever that Dr. Joe would be most at home in a chapel with flexible walls.

"Thanks for everything," I said, helpfully unplugging his record player. "I'll put up the posters if you'll leave them."

He looked at me disapprovingly. "You don't seem to appreciate the seriousness of this," he said. "This is brainwashing direct from Satan by way of his Communist puppets in the popular music industry."

I wished BooBoo were there to quote Springsteen; that would get rid of the Reverend Gentleman if anything would.

Dr. Joe stared at the albums I'd put on the counter in order to free my hands for shoving him toward the door. His face grew purplish, and he pointed.

"You see?" he said. "You see now? They're even admitting it."

The first album in the stack was a debut release by a new band called The Interstellar Peace Project. Lousy name for a group, I thought. The cover was bad, too — a lot of stars and galactic gunk shaped like a dove on a black background.

What had Dr. Joe upset was a white sticker in the lower right corner that I hadn't noticed before. It said: "gniksaM drawkcaB gninraW."

"Well, I'll be damned," I said.

"I know, I know," Dr. Joe said excitedly. He picked up the album and turned it over to read the back. In a few seconds he shrieked.

I looked at the title his quivering finger was trying to point at: "The Pan-Humanistic Backward Bop."

"Humanism!" he shouted. "Communism!"

"Fluoridation!" I added.

I charged him \$9.98 for the album, two dollars more than our usual discount price. He left ecstatic because he'd really be able to work his viewers into a frenzy with *this*.

I was glad to be rid of him until I saw that he'd left his record player.

Resigned to yet another evangelical visit, I went back to putting out new albums. As I worked, I realized

that I was filing an awful lot of Interstellar Peace Project records. It wasn't smart to stock that many copies of a debut album until the band proved itself.

I took a copy to the back room to check my files, and I noticed that the album didn't have the white sticker.

By the time I finished going over my carbons, it had dawned on me that I had fifty copies of an album I hadn't ordered. And according to my invoices, the distributor hadn't shipped it.

I made some phone calls, and after an hour of the usual Distributor's Wrangle, I got the following explanation:

I did not have any Interstellar Peace Project albums.

Au contraire, I informed the drug-abusing lackey on the other end of the line. I had fifty of the things.

I was told that was not possible for two reasons:

One, the albums had never been shipped.

Two, they did not exist.

Did that mean I could keep them?

I could pulverize and inhale them for all the lackey cared. I thanked him and blew my whistle before hanging up.

The album cover didn't list band personnel, a copyright date, or a label imprint, and the labels on the disk itself only named the five songs: "Learning to Love Crustaceans," "The Pan-Humanistic Backward Bop,"

"Your Stalk-Eyed Friend," "Bureaucratic Mind Candy," and "My Way." I hadn't heard any of them on the radio yet. Usually the jocks got things a few weeks before I did — but then, they didn't necessarily play them.

I put the record on the shop turntable, hoping for something commensurate with the album's mysterious appearance, and was disappointed. It wasn't bad; it just didn't blow my brain out through my ears the way I'd imagined it might.

The vocals were heavily filtered, so the songs sounded like they were being sung underwater by androgynous elves — odd, but not much different from a lot of Top 40 stuff — and merely competent instrumentals relied heavily on synthesized hums and rumbles. The lyrics were arcane, but again, not really weird for rock:

*Your baby is a beauty.
She lives inside a shell.
She's one of several million
Interstellar Personnel.
You've got to learn to love her,
All you backward human nations.
Learn to give it up to love her.
Learn to love real big crustaceans.*

I figured that if the band got any airplay, I'd be able to sell twenty of the fifty copies — maybe a few more if I cut the price. I'd gotten them for nothing, so any sale at all was profit.

I left the record playing and began to file more albums. Almost immedi-

ately I had a sensation that felt like three dozen cockroaches running down my spine. I shuddered and looked around, expecting to see Dr. Joe.

Instead, I saw that all my patrons were standing still with their mouths hanging open. That wouldn't have bothered me if the phenomenon had been confined to two or three of them, but there were fourteen customers in the store, and every one of them was as animated as a Popsicle. After a few seconds I realized that each was staring at the corner speaker nearest him or her.

O.K., it was new stuff they hadn't heard before. No big deal. I approached the patron nearest me and shouted in his ear.

"Like it?" I said. "Just got it in today."

His irises seemed to flicker, but he didn't look at me. When he spoke, his voice was a subdued monotone that was difficult to sort out from the music.

"So beautiful," he said. "So beautiful to be at peace with my friend and her beautiful green shell with eyes like pearls and tail like the terraces of heaven."

"I beg your pardon?" I said.

The track ended, and he looked at me.

"I want that album. I'll pay whatever you say."

"Seven ninety-eight," I said.

By the time I got to the register to

ring it up, all fourteen zombies had crowded around to buy the Interstellar Peace Project album. Their staring eyes made me nervous.

The next track began to play. It was the one Dr. Joe had shrieked about, a real rocker:

*Well, make your pappy happy.
Don't make your mama cry.
You gotta all be ready
When the ships come from the sky.
You gotta back it on up,
Shoo-wop, shoo-wop.
You gotta back it on up,
Shoo-wop, shoo-wop
Turn your bullets into gravel.
Slow your run down to a walk.
'Cause everybody's gonna do
The Humanistic Bop.*

Each zombie became a dancing maniac, like Howdy Doody on speed. They were still able to get money out of their pockets, though, and I no longer felt like the potential main course in a George Romero film.

But I didn't feel exactly comfortable.

BooBoo came in at eight. His eyes looked a little glazed, but I tried not to worry. His eyes always looked a little glazed.

"BooBoo," I said tentatively as I sold another IPP album. "Have you ever heard of a band called The Interstellar Peace Project?"

BooBoo nodded somberly and killed the stereo system. Then he

reached up and switched on the television, which was permanently tuned to the cable rock music channel.

BooBoo turned toward me and jerked his thumb at the screen. "Wild," he said.

"I can't get enough of this," the VJ was saying in a drunken stupor, "and I know you can't either. So, for the forty-ninth time today — but who's counting? — here's The Interstellar Peace Project and their new release, 'The Pan-Humanistic Backward Bop.' I wanna have these guys' babies, how about you?"

The video was of the surreal variety, and the dominant images as the music played were of flowers, dancing sheep, and indistinct giant lobsters.

I watched for a while and then shrugged. It was pretty typical stuff.

"I've sold thirty-two of those albums today," I said, "and I don't even know where they came from. I don't get it." I peered at BooBoo's eyes. "Do you?" I couldn't tell if he'd been turned into a zombie or not.

BooBoo shook his head. "Nice, but it ain't Springsteen."

I was taken back. I hadn't heard BooBoo vocalize anything besides "Wild" and Springsteen lyrics since he'd said, "Thanks for the job."

"That's a relief," I said. "I was afraid that everybody except me was being brainwashed just like Dr. Joe said."

BooBoo snapped off the television,

and the store was quiet. For the first time all day, there were no customers.

"Much as I hate to say it," BooBoo said, concentrating hard on forming the words, "he may be right in this case. I have a master's in psychology, and—"

"You didn't mention that on your job application."

One corner of his mouth curved up. "I thought it'd keep you from hiring me. Anyway, I've watched that video twenty times since noon, and I can't help but see it as a subtle attempt at behavior modification."

I was staring at him. "You can even say big words."

He nodded. "One way to condition a subject is by anchoring a desired situation or behavior with positive, behavior-reinforcing actions or images. In that video, what I'd consider positive images occur during lines of the song that seem to be trying to convince the listener to accept something."

I didn't ask what, but he told me anyway.

"The strongest anchoring," he said quietly, "if that's what it is, occurs when the band is singing about ships coming from the sky."

We were both quiet for a few minutes. I tried to convince myself that BooBoo had always been off his nut and was only now displaying the complete symptomatology.

But I'd never heard of IPP before that morning, and neither had he.

Neither had anyone else. Even the Beatles had cranked it out in dives for a few years before hitting the top of the charts.

The Interstellar Peace Project had done it in a day.

Well, what if they had? With the right packaging, the advertising industry could have made Queen Victoria a teen idol. Or even Dr. Joe.

"Look," I said, "we shouldn't get paranoid. After all, Americans blow millions on sugar water every year because of a few sexy commercials. Whoever these guys are, they've just got a great manager who's getting them incredible PR and distribution, that's all. It's not impossible, not with enough money."

"Wild," BooBoo said. It was a reassuring sound.

I didn't want to waste any more time worrying about a pop craze; I had a date with a cheese-ball eater. I took care of a few things in the office, gave BooBoo a pat on the back, and headed for the door.

Randall came in before I got there.

I knew him well enough to know that he would never willingly come to Electroshock Records and Tapes after dark. Something was wrong.

"I'm not due at your place for ten minutes," I said, checking my watch. "What're you doing here?"

Randall grasped my shoulders and gazed into my eyes.

"Peace and love, Sister," he said. "We await the crustaceans."

I looked back at BooBoo.

"Now," I said, "we should get paranoid."

I tried to stop him, to talk to him, to find out what had happened to him and to God only knew how many others, but he wouldn't stay. I considered using the bat, but I could sooner have clobbered a delirious hamster.

He'd been buying groceries that afternoon and had heard "The Bop" while selecting cheese. Now he was going to a rally at the football stadium and wanted me to come along. The fans of The Interstellar Peace Project were going to play the album over the public-address system and memorize the lyrics.

I felt the sick realization that I'd never have a nice, quiet evening with him again.

He left without me. I stood looking after him through the dirty plate glass until he was obscured by a chili feed poster.

Too wiped out to go home, I walked back to the office. I could feel BooBoo watching.

I closed the door behind me, lay down on the black Naugahyde couch, and tried not to think.

After finally dozing off, I dreamed of giant lobsters singing of peace and love. I was chasing them with a forklift truck and trying to drop them into a swimming pool filled with boiling water. But just as I got one into the

steam, it turned into Dr. Joe. I dropped it anyway.

Then I had my usual dream in which my mother asks me why I'm not married yet. But toward the end her head turned into a cheese ball.

My eyes shot open, and at first I didn't remember where I was. The light that came into the office through the cracks around the door was weak and bluish. I got up and stumbed out into the shop.

The overhead lights were off; the blue glow came from the amplifier. BooBoo was sitting behind the counter with his head in his hands, listening to a song about cars and girls. The volume was low, and the place seemed more peaceful than it ever had before.

"BooBoo?" I said softly. I didn't think he'd seen me yet. "What time is it?"

He answered without moving. "After one."

"Why're you still here? Closing time was over an hour ago."

He shrugged his shoulders.

"Many customers tonight?" I asked.

He picked up an album from the counter and waved it. I couldn't see what it was, but I didn't have to. "Last one," he said.

I went behind the counter and sat beside him on the other stool.

"What's going on?" I muttered. "When somebody like Randall switches from Rachmaninoff to underwater

elves, something unnatural is happening.”

BooBoo shrugged again. In the faint blue light, I could see that he was lip-synching along with Springsteen. He probably wasn't even listening to me.

He'd put the last IPP album back on the counter. It was too dark to see the illustrations clearly, but I ran my fingers across the plastic, thinking that maybe I could feel what made this so different from everything else.

My fingers stopped at the lower right corner.

There was nothing there. But in my mind's eye, I'd been running my fingers over the first IPP album I'd noticed, the one I'd sold to Dr. Joe.

“Gniksam,” I mumbled. “Drawkcab. Gninraw.”

“Wild,” BooBoo murmured.

I spun around to lift the tone arm off BooBoo's album and accidentally sent the stylus skittering across the tracks.

BooBoo buried his face in his arms.

I found Dr. Joe's record player under the counter next to the softball bat, ripped open the IPP album, and put the disc on the backward-playing turntable.

“Sorry about your record,” I said as I plugged in the player, “but this is important.”

BooBoo raised his head and looked at me. I could just make out the faint glistening in his eyes that said noth-

ing was more important than Springsteen.

I had to ignore it. If I were right, BooBoo would understand soon enough.

I cued up the stylus at the end of “The Pan-Humanistic Backward Bop” and flipped the switch to the ON position.

The sounds that skreeked out of the cheap little speaker were horrible at first, and they stayed that way. I was about to turn it off to save our ears when voices pierced through the cacophony.

“Greetings to you,” the voices said. It was another chorus of underwater elves. But they weren't singing.

“We estimate that no more than 4 percent of your population will be able to distinguish these words,” the voices continued. “You are those who are not affected by the subsonic stimuli encoded into our songs and who will therefore examine this music to determine what has happened to the other 96 percent. If you are intelligent enough to find this message, you are intelligent enough to deserve an explanation. And to listen to reason.

“You may not have noticed, but you people are making a terrible mess of things. Sorry to be blunt, but we don't believe in thrashing outside the shrub.

“Indeed, your race is so maladjusted that you are a threat not only to yourselves but to other intelligent

species of the galaxy.

"Because of ethical considerations you wouldn't understand, we can't blip you out of existence. Because you're not at all nice, we can't leave you alone. Curiously, there are a few dissenters in the Galactic Community who feel that we should continue allowing you to develop on your own — but, happily for all, we have overruled them. It's clear that you can only get worse if left to yourselves.

"Thus, we have to correct your flaws without turning you into non-sentient plantlike organisms.

"To that end, we're infiltrating each of your cultural divisions with what most will think is music. All over the planet, subsonics are implanting peaceful impulses and erasing nasty ones. Only the packaging varies.

"The apparent blank stupidity of those affected is temporary. It's easiest to shut down most intellectual functions during modification.

"Unfortunately, we can't seem to develop a sequence of subsonics that will affect all of you. So we must settle for a majority and try to reason with the rest. With you.

"We believe you'll be valuable members of the Galactic Community once your defects are eliminated. We expect that to be accomplished within three of your years. Give or take a couple. There are many variables.

"One variable is you who hear these words. Two years after the Proj-

ect's initiation, we'll send ambassadors to assess your reactions. You'll find that we're pretty nice, despite the fact that we evolved from sea creatures similar to some you frequently boil and devour.

"You have a history of wishing for peace, and now you're getting it. If you have questions, we've phrased all this in slightly different terms on the other tracks.

"Have a moderately enjoyable day."

I turned off the record player and looked at BooBoo. Even in the dark, I could see his lips pursing to articulate a "W—."

"Please don't," I said, and he stopped himself.

It was so silent then that all I could hear was the blood pumping past my ears.

We both believed it. I believed it because it would take an alien power to make Randall change. BooBoo believed because it was easier than not believing.

"So what do we do?" I said finally.

BooBoo started his Springsteen album again.

He meant there was nothing to do but what we'd always done. We hadn't been able to transform the world ourselves, so now it was time to let someone else take a shot at it.

"Peace will be good," I said.

It sounded stupid. What did I know about peace or war or anything in between? I'd been brought up in a

safe midwestern middle-class home; I'd majored in Music Theory in college for three years; I'd worked in Electroshock Records and Tapes for three more years. The closest I'd been to the horrors of human strife was the evening news.

I knew that we screwed up a lot, but I hadn't experienced any of it firsthand.

So I began to feel more afraid of what the aliens said they were giving us than I was of our nasty impulses.

I must have been saying all of that out loud, because BooBoo put his hand on my arm and stopped me in mid-thought.

"I've seen some of it," he said. "They're right. We're despicable." He didn't elaborate.

"Can we trust them to make us any better?"

BooBoo didn't answer.

In any case, what could I do about it?

I went back to my Naugahyde couch.

I felt lousy in the morning, and I avoided smooth surfaces so I wouldn't risk seeing my reflection. BooBoo didn't look good, either. The smart thing to do would have been to stay closed, but I didn't feel like doing anything smart. I was grubby and grouchy and foul-breathed. I was nasty, and I wanted to share it with the Galaxy.

BooBoo stayed around. I asked

why he didn't go home, but he only smiled. He looked as if he were expecting something to happen and didn't want to miss it.

Sure enough, Dr. Joe came back.

"Greetings, Brother and Sister," Dr. Joe said. "We await—"

"Yeah, yeah," I snarled. "You await the coming of the crayfish." I shoved the portable record player across the counter at him. "Take it. Although you probably don't care about satanic messages anymore."

Dr. Joe smiled pleasantly. He could actually look like a sweet guy. It scared the hell out of me.

"I have seen the error of my ways," Dr. Joe said softly. "It is far better to focus on good than to search for evil."

"Uh-huh," I said. "Take your machine and blow."

His face took on an expression of deep concern. "Sister Terri, what's wrong? Don't you feel well?"

I was about to comment upon his mother's disappointment when something in my chest squirmed.

"How did you know my name?"

Dr. Joe smiled benignly and spread his hands in a gesture of gee-I-don't-know-I-guess-we're-all-brothers-and-sisters.

On impulse, I plugged in his record player, put on the IPP album, and played the same passages that BooBoo and I had listened to the night before.

"Do you hear it?" I asked Dr. Joe.

"Hear what?" he said, his voice

dripping molasses.

I reached across the counter and got him by the necktie. "The backward message. From the aliens."

Dr. Joe shook his head. "All I hear is noise. That's a beautiful song, but only when it's played properly."

I removed the record and tried to make Dr. Joe take the player again. He looked at it as if he'd never seen it.

"If you didn't come for this," I said nastily, "just what do you want?"

He opened his briefcase and pulled out new posters:

DR. JOSEPH WRIGHT'S SUNDAY MORNING SHOW, "THIS HALLELUJAH HOUR OF OURS," IS CHANGING ITS FORMAT AND WILL NOW BE TITLED "LEARNING TO LOVE CRUSTACEANS."

I said I'd post them, and Dr. Joe walked out happily, promising to come back and buy IPP's next album when we got it. He'd heard about it on the radio.

"There's going to be *another* one?" I moaned.

"Wild," BooBoo grunted.

A customer came in about noon that same day. He was a wizened man who looked terribly angry.

"You!" he shouted, pointing at me. "You work here?"

I admitted it.

"Good," he snapped. "I can't find anything on the radio except that junk about dancing backward. Play something else for me and I'll buy it. Beethoven. Chuck Berry. The Plas-

matics. Anything."

So there were others in town who were unaffected. I put on a Chuck Berry album and played "Johnny B. Goode."

"Primitive," the man sighed as the twanging of Chuck's guitar reverberated off the walls. "But music for the universe. There's a recording of that song on *Voyager 1*, you know." He smiled at me. "By the way, I'm Alan Michaels. I teach physics at UMKC. Or did until yesterday, anyhow."

I hadn't known about *Voyager*, so he told me. When the probe was being prepared for launch, a group of scientists had decided to go a step beyond the Pioneer plaque. They'd prepared a gold-plated recording of Earth sounds and music in case a spacefaring race millions of years in the future came across the thing. "Johnny B. Goode" was the only rock-and-roll song included.

So Chuck had written a song for the stars. As the idea sank in, I thought of ten or twelve other songs that, for my money, were in the same category.

We didn't need alien noise to save us, did we? Despite all our nastiness, didn't we create music that could beat anything any giant lobster ever imagined?

When Chuck was finished, I played the backward message for Professor Michaels. He was frowning when it began, and by the end of the track, his eyes were shouting death rays.

BooBoo looked concerned. "Pro-

fessor," he said, "you're thinking something nasty, and I want to suggest that you think again. It's not pleasant to have our destiny controlled by another species, but it may be necessary."

The professor's expression softened slightly. "Maybe. But the struggle for survival on this world forced us to evolve into mean, tricky creatures. There's no reason to expect any other world's dominant species to have evolved any differently. It may be that these, ah, crustaceans are making us docile for some nefarious purpose. All we have to convince us otherwise is their say-so. Those in positions of power have lied to us before."

BooBoo acknowledged that, but still felt we should take the aliens at their word. After all, if they were trying to conquer us, they wouldn't provide a recorded explanation, would they?

The professor suggested that the recording might only be more evidence of how tricky they were.

BooBoo responded with Springsteen lyrics he felt were appropriate. The professor tried to provide an intelligent rebuttal, but it wasn't easy.

I stopped listening. They each had their points, and they had gotten me thinking.

Only one IPP album had displayed the white sticker. It had been only because of Dr. Joe that I'd noticed it at all. And it was only because I'd had

his rigged record player that I'd tried to find the message.

How had it happened that Dr. Joe had first come into the shop babbling about backward masking only one day before the musical invasion had begun?

It was almost as though he (or someone controlling him?) wanted to make *sure* I got the message.

It was almost as though I had been chosen.

For what purpose? And by whom?

The backward message had said something about "dissenters" in the Galactic Community....

I blew my whistle loud enough to make BooBoo and the professor stop arguing.

"Either one of you may be right," I said. "So we have to prepare for either situation."

They looked at me quizzically, and I explained.

Professor Michaels is analyzing the waveforms of the IPP songs. It's a complicated study, but two years should be enough time to figure out what the "subsonics" are. We'll use his results when we enhance our weapons.

BooBoo and I are collecting the songs we'll need if we have to launch a counterassault. He's going a little overboard on the Springsteen, but I'm not complaining.

Randall came in yesterday after-

noon to see if we had the second IPP album yet. We did; a case of them showed up two days ago. I don't mind selling them. After all, they might be doing a lot of good.

On the other hand, I won't sell one without taking the opportunity to test the raw, unenhanced power of our own arsenal.

I tried Rachmaninoff when Randall walked in, and it had no effect. Then I tried Dylan. Nothing. Bach. Zero.

Then, as he was leaving, I put on one that Professor Michaels suggested, another of the Voyager songs.

"Dark Was the Night," by Blind Willie Johnson, recorded in 1927. It's instrumental blues, one man and a guitar that cries and moans. Pierces right into my stomach.

Randall paused at the door and looked up at a speaker. His face lost its blank happiness for a millisecond, and I saw the music reflected in his eyes. Then he was gone.

Maybe I'll have another quiet evening with him after all. Someday.

This morning Dr. Joe came in for the same reason as Randall. I tried Chuck Berry. Then Mozart. Then one that always makes me feel like balling up my fists and shaking at the Powers That Be.

Angry, revolutionary stuff from

The Who. "Won't Get Fooled Again."

I turned it up loud, and the store shook with rebellious feedback and Daltrey's gravelly shouting.

Dr. Joe didn't stop smiling as he looked at me and said something.

"What?" I asked.

"Are you sure you won't get fooled?" he yelled.

I turned it up until my ears hurt.

Dr. Joe went out. As I looked out the smudged window, I thought I saw him give me a thumbs-up sign.

Maybe he came back to make sure I'd heard what I was supposed to hear.

Well, whoever he is, whatever side he's on, I heard.

By the time the "ambassadors" from The Interstellar Peace Project come, we'll have found enough Unaffecteds to smuggle our enhanced records into radio stations. And to put them on the air at a moment's notice if they're needed.

We sent music to the stars. We can still hit the top of the charts.

For the time being, though, I'm giving the project the benefit of the doubt. In two years I'll be here to meet them with an olive branch in my hand.

And just in case, a bucket of melted butter under the counter.



Fantasy & Science Fiction

MARKET PLACE

BOOKS-MAGAZINES

S-F FANTASY MAGAZINES, BOOKS. 1985 catalog \$1.00. Collections purchased (large or small). Robert Madle, 4406 Bestor Dr., Rockville, MD 20853.

SCIENTIFANTASY SPECIALIST: Books, magazines. 20¢ stamp for catalog. Gerry de la Ree, Cedarwood, Saddle River, NJ 07458.

REALITY INSPECTOR. Unusual fantasy story about chess, computers, consciousness. \$5. John Caris, 56E Westgate, San Francisco, CA 94127.

SOFT BOOKS, 89 Marion Street, Toronto, Canada M6R 1E6. Howard Lovecraft, Arkham, Necronomicon, etc. bought/sold. Catalogues issued.

SEND 25¢ FOR CATALOG of Scientifantasy books & pulps. Canford, Drawer 216, Freeville, NY 13068.

WE PAY TOP PRICES for quality SF 1st ed.'s. Fantasy Archives, 71 8th Ave., NY 10014.

SPECULATIVE FICTION hardcover first editions. Catalogs issued. DMK BOOKS, 22946 Brenford, Woodland Hills, CA 91364.

SCIENCE FICTION, FANTASY, OCCULT catalogue. Rare, out of print, small press. Free. Sangraal, 189 23 St., Brooklyn, NY 11232.

PROOF JESUS NEVER EXISTED! Scholarly booklet proves Josephus created fictional Jesus. Gospels. \$4.00 — Vector, Box 6215-F, Bellevue, WA 98008.

FOREIGN EDITIONS OF FANTASY AND SCIENCE FICTION. Copies of French, German, Spanish, Japanese and Swedish editions available at \$2.50 each, three for \$7.00. Mercury Press, Box 56, Cornwall, CT 06753.

SCIENCE FICTION/FANTASY Catalog, O-P 1st Edition Hardcover. OTHERWORLDS, 23834 Wendover, Beachwood, OH 44122.

THE BEST IN SCIENCE FICTION AND FANTASY is found in my catalog of pulps, digests, paperbacks, and hardcovers. Copy free upon request. Collections also purchased. Will travel for large accumulations. Ray Bowman, Box 5845F, Toledo, Ohio 43613.

MOONSTONE BOOKCELLARS, INC. 2145 Pennsylvania Avenue, NW, Washington, D.C. 20037. (202) 659-2600. Science Fiction, Fantasy and Mysteries. Special Orders Welcome!

HARDCOVER SCIENCE FICTION, FANTASY. Reasonable Prices. Free Lists. Norman Syms, 8 Broadmoor Vale, Upper Weston, Bath, Avon, England BA1 4LP.

1000's of SCIENCE FICTION, HORROR, OCCULT paperbacks, hardcovers. Free catalog. Lamira, Box 12093, Dept. 86, Baltimore, MD 21281.

SELLING LARGE COLLECTION SF paperbacks, hardbounds. Free list. Mahoney, 73 Longview Terr., Rochester, NY 14609.

65,000 SF and Mystery paperbacks, hardcovers, magazines in stock. Free catalogs. Pandora's Books, Box F-54, Neche, ND 58265.

FREE sample issue, THE IMMORTALIST. Cryonics Association, 24041 Stratford, Oak Park, Michigan 48237.

THE LETTERS OF JRR TOLKIEN, selected by Humphrey Carpenter and Christopher Tolkien, complete with notes and index, first edition hardback, \$10.00 post paid. Mill Books, RD #2, Biglerville, PA 17307. (717) 677-8470.

Do you have something to advertise to sf readers? Books, magazines, typewriters, telescopes, computers. space-drives, or misc. Use the F&SF Market Place at these low, low rates: \$10.00 for minimum of ten (10) words, plus \$1.00 for each additional word. Frequency discount: 10% for six consecutive insertions, 15% for twelve consecutive insertions. Send copy and remittance to: Adv. Dept., Fantasy and Science Fiction, P.O. Box 56, Cornwall, CT 06753.

EXCEPTIONAL SCIENCE FICTION NOVEL! Autographed, numbered copies of *The Star Sailors* (St. Martin's hardback). SASE for information or \$6.95 postpaid. Metaspaces Enterprises, Box 1091, Rockville, Maryland 20850.

BOUGHT, SOLD, TRADED, SF&F hardbounds, pulps, digest, Send 2 stamps for gigantic 15,000 item catalog. Graham Holroyd, 19 Borrowdale Dr., Rochester, NY 14626.

SELLING part of private collection including SF&F. SASE. Jim Wilkerson, POB 6484, Tallahassee, Florida 32314.

THE COMPUTER DATA AND DATABASE SOURCE BOOK. 900 pages! Avon Softbound, \$14.95/\$2.00 shipping. Marshal & Morgan Books, P.O. Box 11613, Portland, Oregon 97211.

PURPLE UNICORN BOOKS selling-buying new & used SF, Fantasy. Free catalog, Box 1056, Dania, FL 33004.

SOLAR MAN — Man is Solar Man in embryonic form. The time is now to prepare humanity for eternity. \$6.00 ppd. 252 pages. Thomas P. Ehrenzeller, P.O. Box 776-A, Dauphin, PA 17018.

CLOTHING

F&SF T-SHIRTS. Navy blue with original magazine logo imprinted in white OR: Red shirt with blue logo. Sm, med, large, extra-large. \$6.50 each. Mercury Press, Box 56, Cornwall, CT 06753.

MISCELLANEOUS

ESP LAB. This new research service group can help you. For FREE information write: Al G. Manning, ESP Lab of Texas, Box 216, Edgewood, TX 75117.

FANTASTICALLY INTELLECTUAL BUTTONS! Democritus, Curie, Einstein, and 600 other scientists, philosophers, authors, artists, composers and historical personages on buttons and magnets. Illustrated, unique, free catalog! Buttonworks, 671 State Street #13, Portsmouth, NH 03801.

SF AND WAR. Play by mail games. "Interstellar Conquest" or "World Power." Send \$5 to David Dodson, P.O. Box 17249, Salem, OR 97305. \$1 for information.

INVENTIONS, IDEAS, TECHNOLOGY WANTED! Industry presentation/national exposition. 1-800-528-6050. X831.

SCIFICTION CONTEST — unpubd. \$4 entry toward prizes. Deadline 4-30-85. MSS SASE Gordoncreek, 144 Milton, Ballston Spa, NY 12020.

RE-MARK-ABLE RUBBERSTAMPS for all your paperwork. Dragons, Unicorns, Spaceshuttle, Enterprize, & more. Catalog \$1.00 from Rubberstamps, 616 S. Governor, Iowa City, IA 52240.

PERSONAL

MEET OTHERS WORLDWIDE — For hobbies, sports, correspondence, vacations — friends all ages and interests. Electronic Exchange, Box 68-F2, Manhattan Beach, California 90266.

SINGLE? Meet that special person! Call DATELINE — free: 800-451-3245.

MAKE NEW FRIENDS. Join America's largest correspondence club. Information: Send stamp. Friendships Unlimited, Box 350, Brooklyn, NY 11202.

RECORDS/TAPES

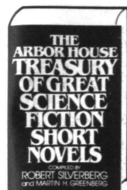
GREAT RADIO PROGRAMS! Science-Fiction, Mystery, Adventure. Free list cassettes. Rare Radio, Box 117-F, Sunland, Calif. 91040.

TRAVEL

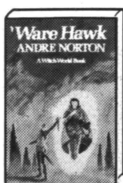
GHOSTS! Unique tour to England in search of ghosts/spirits. Escorted by psychic researcher. Free brochure: 800-227-3800 extension "ICTS" (24-hour toll-free service).



Explore new worlds beyond the limits of time and space.



9076 Pub. ed \$19.95



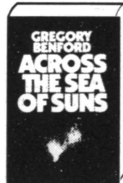
1073 Pub. ed \$11.95



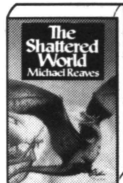
1404 Spec. ed.



1347 Spec. ed.



1388 Pub. ed \$15.95



1305 Pub. ed \$16.95



1248 A Matter for Men; A Day for Damnation. Comb. pub. ed \$33.90



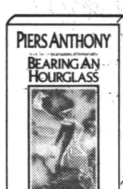
1420 Includes the First, Second, and Third Books. Spec. ed.



0943 Another Fine Myth; Myth Conceptions; Myth Directions; Hit or Myth. Spec. ed.



1321 Pub. ed \$16.95



1396 Pub. ed \$13.95



1263 Pub. ed \$15.95

Take any 5 for \$1 WITH MEMBERSHIP.

SEE OTHER SIDE FOR ADDITIONAL SELECTIONS.

How the Club Works:

You'll receive your 5 books for only \$1 (plus shipping and handling) after your application for membership is accepted. We reserve the right to reject any application. However, once accepted as a member, you may examine the books in your home and, if not completely satisfied, return them within 10 days at Club expense. Your membership will be cancelled and you'll owe nothing.

About every 4 weeks (14 times a year), we'll send you the Club's bulletin, *Things to Come*, describing the 2 coming Selections and a variety of alternate choices. In addition, up to 4 times a year you may receive offers of special Selections, always at low Club prices. If you want the 2 Selections, you need do nothing; they'll be shipped automatically.

If you don't want a Selection, prefer an Alternate, or no book at all, just fill out the convenient form always provided and return it to us by the date specified.

We allow you at least 10 days for making your decision. If you do not receive the form in time to respond within 10 days and receive an unwanted Selection, you may return it at our expense.

As a member you need take only 4 Selections or Alternates during the coming year. You may resign any time thereafter or continue to enjoy Club benefits for as long as you wish. One of the 2 Selections each month is only \$4.98. Other Selections are higher, but always much less than hardcover publishers' editions — up to 65% off. The Club offers more than 300 books to choose from. A shipping and handling charge is added to all shipments. Send no money now, but do mail the coupon today!

Note: Prices shown are publisher's edition prices.

SCIENCE FICTION BOOK CLUB®

Dept. RR-587, Garden City, NY 11530

I want the best SF in or out of this world! Please accept my application for membership in the Science Fiction Book Club. Send me the 5 books I have numbered in the boxes below, and bill me just \$1 (plus shipping and handling). I agree to the Club Plan as described in this ad. I will take 4 more books at regular low Club prices in the coming year and may resign any time thereafter. SFBC offers serious works for mature readers.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Mr. _____
Ms. _____ (Please print)

Address _____ Apt. # _____

City _____

State _____ Zip _____

If under 18, parent must sign. _____

The Science Fiction Book Club offers its own complete hard-bound editions sometimes altered in size to fit special presses and save you even more. Members accepted in U.S.A. and Canada only. Canadian members will be serviced from Canada. Offer slightly different in Canada. 38-S231P

LET YOURSELF ROAM

through time...through space...
through other dimensions of
mind and matter...



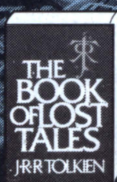
★ 1149 Comb. pub.
ed. \$33.90



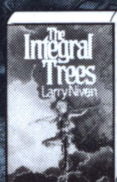
1099 Pub. ed. \$15.95



1271 Pub. ed. \$14.95



1362 Pub. ed. \$14.95



1180 Pub. ed. \$14.95



★ 1164 Spec. ed.



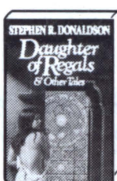
1131 Spec. ed.



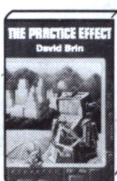
0166 Pub. ed. \$16.95



† 1289 Spec. ed.



1206 Pub. ed. \$14.95



1230 Spec. ed.



0935 Pub. ed. \$14.95



0075 All 5 Amber
novels. 2 vols.
Comb. pub. ed. \$32.30



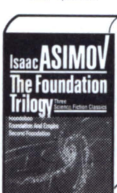
1354 Storm Season:
The Face of Chaos;
Wings of Omen.
Spec. ed.



0752 Elric of
Melniboné; The Sailor
on the Seas of Fate;
The Weird of the
White Wolf. Spec. ed.



1172 The Vanishing
Tower; The Bane
of the Black Sword;
Stormbringer. Spec. ed.



6221 Foundation;
Foundation and Empire;
Second Foundation.
Pub. ed. \$17.95



0992 Dragonsong;
Dragonsinger;
Dragonrums.
Comb. pub. ed. \$38.85

TAKE ANY 5 FOR \$1 WITH MEMBERSHIP

See other side for coupon and additional Selections.

THE SCIENCE FICTION BOOK CLUB®